

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.



FEBRUARY, 1878.

FARMERS' children have the same aspirations, the same love of the beautiful as other children, and, if of sufficient enterprise, will find means to gratify this æsthetic taste. Unless it is provided in their homes and grounds, farmers will continue to mourn over the fact that their daughters have no love for the old homestead, and their sons fly to the cities, crowding still more these already overflowing thoroughfares, robbing the country of its wealth. In our cities, lawns and flowers are to be found and enjoyed by all who seek them, for among the many there are some persons of taste and culture; but, if the farmer neglects the culture of flowers in his own garden and door-yard, where, in the country, can his children find such Eden-spots? If father begrudge wife and little ones a few dollars and a little labor to make home pleasant, he need not be surprised if his children have no love for home. If, in addition to this, he endeavors, by coarse and disparaging remarks, to suppress the love of the beautiful in the little ones, as they grow up they will think little of the taste and wisdom of father. A man may *think* a hill of potatoes or corn "*More handsome than any flower that ever grew*," but if he has a grain of sense, or any regard for the good opinions of those about him, he will keep such nonsense to himself.

God, doubtless, could have made a world destitute of beauty, without a flower to gild the landscape, but doubtless God in His wisdom

did not do so; and after creating man in His own image, He placed him in a beautiful garden, in which was every plant that was pleasant to the sight or good for food. When man became a law-breaker, instead of being sent to the penitentiary he was expelled from this garden, and had to work for food among the thorns and thistles, and make his own corn-patch and potato-field. And some men have never risen above their fall — *they like it*. They never even give one longing look toward the lost Eden.

In Europe, farming is held in the highest esteem — it secures the attention of men of the highest political and social positions. Even Royalty is not dishonored by contact with the soil. For such persons to engage in commerce, or "shop-keeping," as it is called, would be a disgrace. Here, farming is degraded below the shop. *Only a Farmer*, or a *Granger*, are words we often hear, not used as complimentary terms. The farm is not a place for stolid drudgery and unthinking toil, but a field for study, thought and research, — a place where not only money but an honorable name may be earned. When this is true of American farms and farmers, our young men will love the occupation of their fathers, and flowers will adorn every country home.

The culture of flowers is one of the few pleasures that improves alike the mind and the heart, and makes every true lover of these beautiful creations of Infinite Love wiser and purer and nobler. It teaches industry, patience, faith and hope. We plant and sow in hope, and patiently wait with faith in the rainbow

promise that harvest shall never fail. It is a pleasure that brings no pain, a sweet without a snare. We gaze upon the beautiful plants and brilliant flowers with a delicious commingling of admiration and love. They are the offspring of our forethought, taste and care—a new, mysterious, and glorious creation. They grew—truly, but very like the stars and the rainbow. A few short weeks ago the brown, earthy beds were bare and lifeless; now they are peopled with the fairest and frailest of earth's children. We have created all this grace; moulded the earth, the sunshine and the rain into forms of matchless beauty, and crystallized the dew-drops into gems of loveliness.



WE HAVE been requested, by a "living preacher," though not a "voiceless" one, to publish HORACE SMITH'S immortal "Hymn to the Flowers." It is doubtless familiar to very many of our readers, but others may never have seen these sweet lines of a poet, upon whose grave loved flowers have bloomed for a quarter of a century. All will like to preserve a poem that abounds in truthful beauty.

Day-stars that ope your eyes with morn, to twinkle
From rainbow galaxies of earth's creation,
And dew-drops on her lowly altars sprinkle
As a libation!

Ye matin worshipers, who, bending lowly
Before the uprisen sun, God's lidless eye,
Throw from your chalices a pure and holy
Incense on high!

Ye bright mosaics, that with storied beauty
The floor of nature's temple tessellate,
What numerous emblems of instructive duty
Your forms create!

In the sweet-scented pictures, heavenly Artist,
With which Thou paintest nature's wide-spread hall,
What a delightful lesson Thou impartest
Of love to all!

Not useless are ye, flowers, though made for pleasure,
Blooming in field and wood by day and night;
From every source your presence bids me treasure
Harmless delight.

"Thou wert not, Solomon, in all thy glory,
Arrayed," the lilies cry, "in robes like ours;
How vain your grandeur! ah, how transitory
Are human powers!"

'Neath cloistered boughs each floral bell that swingeth
And tolls its perfume on the passing air,
Make Sabbath in the fields, and ever ringeth
A call to prayer;

Not to the dome where crumbling arch and column
Attest the feebleness of mortal hand,
But to that fane, most catholic and solemn,
Which God hath planned;

To the cathedral, boundless as our wonder,
Whose quenchless lamps the sun and moon supply,
Its choir the winds and waves, its organ thunder,
Its dome the sky.

There, as in solitude and shade I wander
Through the green aisles, or, stretched along the sod,
Awed by the silence, reverently ponder
The ways of God,

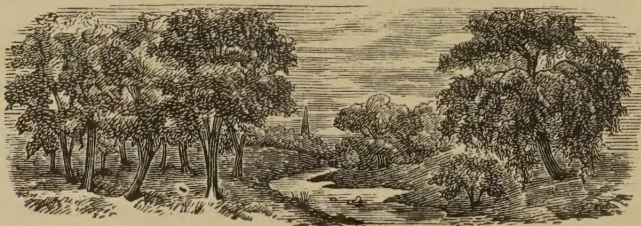
Your voiceless lips, O flowers, are living preachers,
Each cup a pulpit, every leaf a book,
Supplying to my fancy numerous teachers
From loneliest nook.

Ephemeral sages! What instructors hoary
For such a world of thought could furnish scope?
Each fading calyx a *memento mori*,
Yet fount of hope.

Posthumous glories, angel-like collection,
Upraised from seed or bulb interred in earth,
Ye are to me a type of resurrection
And second birth.

Floral apostles, that in dewy splendor
Weep without woe and blush without a crime,
O, let me deeply learn and ne'er surrender
Your love sublime.

Were I, O God! in churchless lands remaining,
Far from all voice of teachers or divines,
My soul would find in flowers of thy ordaining
Priests, sermons, shrines.



IMPROVING HOME GROUNDS.

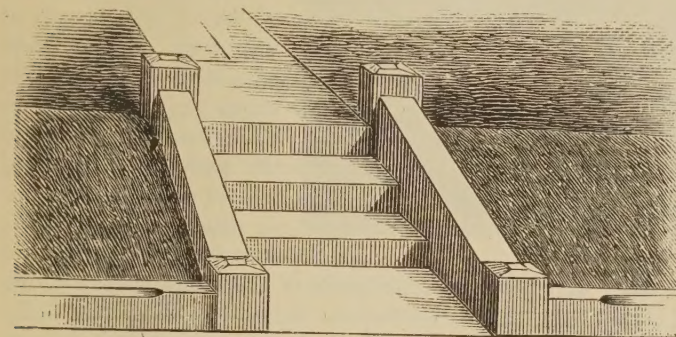
IN our last were given some ideas on the Making of Roads, and we now offer our readers a few suggestions on Laying Out of Grounds and Improving Homes. Where land is level, it is generally thought little skill is required, and we must admit the work is not difficult; but even then it is easy to mar the

first or second story. While we would not select a lot below the level of the street, this plan presents some advantages that our readers will appreciate at a glance.

Having provided for the roadway and sidewalks, we will now attend to the arrangement of the grounds proper. The space in front of the house, and generally the sides exposed to view from the street, should be grass. No arrangement of beds, or borders of box, or anything else, will look so neat as a well-kept piece of grass. It can also be kept in better order at less cost than in any other way. Mixed beds of flowers or shrubbery in the most conspicuous part of the garden are always unsatisfactory. Get a good plat of grass, and good dry, neat walks, and all other things will soon follow.

The very first thing needed in improving ground is to secure good drainage. Have good drains made to carry off all waste water from the house and surplus water from the soil. The next thing is to prepare the soil and locate the walks. Make no more roads than are absolutely necessary, as many walks divide the lawn too much, and greatly disfigure it, especially when small. Of course there must be a bold walk to the front door, and one passing from this to the rear of the house, and in general no more will be necessary. These must be made in the most convenient places—those that would naturally be taken in going from one point to the other.

Two great errors are usually made, both by

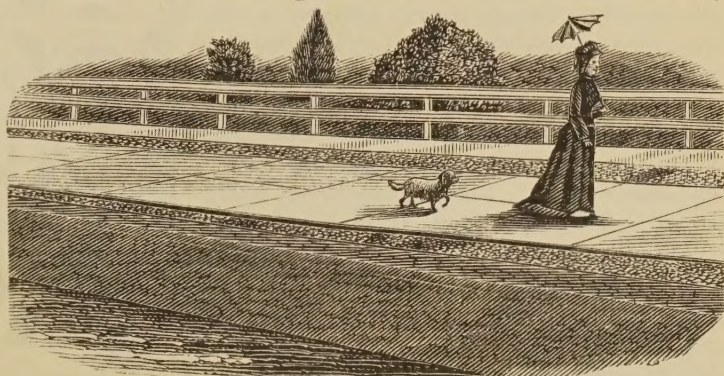


HIGH LOT, TERRACED AT LINE OF WALK.

beauties and destroy the advantages of the most favored situation. When the lot is either higher or lower than the roadway, a good deal of skill is sometimes required to produce a pleasing effect, and especially in the latter case. Where the lot is higher than the road it is more easily managed. One plan is to terrace down at the line of the lot, sodding the terrace, with steps at the entrance, as we have shown in the engraving. Another way is to continue the level of the lot to the edge of the sidewalk, and then terrace to the curb-stone, as illustrated in the engraving below. This course may be pursued where the land is level, but when rolling or uneven is not practicable, as the sidewalk would have to follow the natural rise and fall of the land.

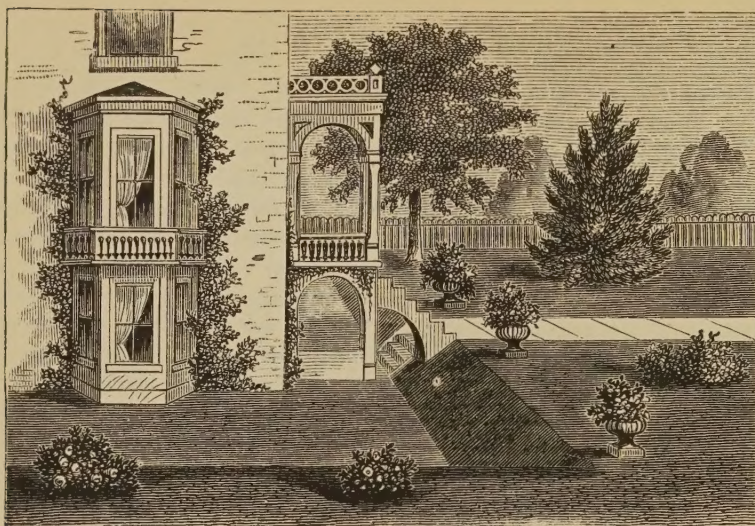
Nothing is more unpleasant than to see a house and grounds below the level of the roadway. It indicates apparent dampness and want of drainage, and lowers and dwarfs the buildings. How to obviate this appearance is the point to be gained. We have never seen a plan better than one here given from

Scott's Suburban Homes. It will be observed that the front of the lot is raised, so as to be on a level with the street, with a terrace and steps leading to the level of the lot, so that the front entrance is easy, and commands either the



HIGH LOT, TERRACED AT LINE OF ROADWAY.

gardeners and amateurs; one destroying the lawn by cutting it up with unnecessary walks and flower beds, the other producing the same result by almost literally covering it with trees and shrubbery. Grass cannot grow well among



EXCELLENT PLAN FOR A LOW LOT.

the roots and under the shade of trees and shrubs, and no lawn can look well cut up into sections by numerous roads. Most of the little lawns seen in this country are almost entirely destroyed by one or both of these causes. The main part of the lawn should be left unbroken by any tree or shrub, as a general rule, and if any tree is admitted it should be only an occasional fine specimen, like a Purple Beech, or Magnolia, or Cut-leaved Birch. The shrubbery should be in clumps or groups, in proper places, and so thick as to cover all the ground, the soil under them being kept cultivated and clean like a flower bed. A tree or two for shade and ornament are, of course, desirable; but plant for the future, not for the present, and always have in view the size and form and habits of the trees when full grown, and not their present small size and perhaps delicate form.

I will try and make my meaning plain by the engraving, which shows, perhaps, a very good and convenient design, but is spoiled by too much and improper planting. If nearly or quite all the trees should be removed from the center of the lawn, and the extra and unpleasant curve given to the walk at the entrance corrected, how much better it would appear. This drawing was taken from an old and, in some respects, very fine place.

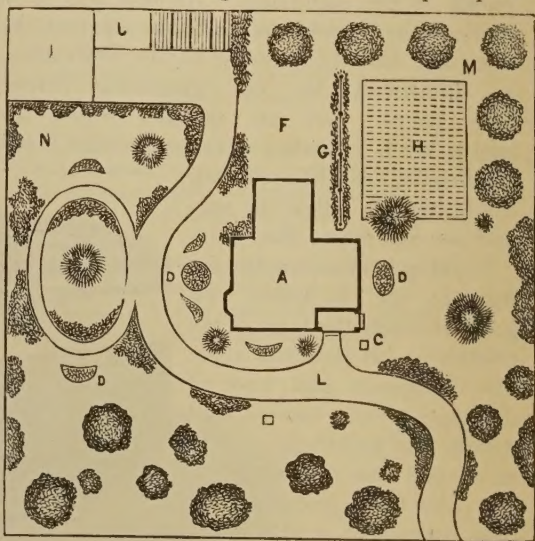
To make the subject as clear as possible, some designs for small grounds are given that will be useful; not that any one, perhaps, will be disposed to follow either plan, but they may be suggestive, and productive of something better. In all the plans the letters of reference have the same meaning. A, Dwelling-house; B, Lawn; C, Vase or Statuary; D, Flower Beds; E, Walks; F, Drying Lawn; G, Grape Trellis; H, Vegetable Garden; I, Stable or

Barn; J, Poultry-house; K, Cold Frames; L, Carriage Roads; M, Fruit Trees; N, Croquet Grounds; S, Seats.

Fig. 1 shows a small village garden, such as I once saw, and from which the drawing was taken. The walk, in the center of the lot, led directly to the front door; then curved, as shown in the engraving, to the kitchen door, leading directly to the back of the garden. There were four shrubs in front, and a large, well-filled vase placed in

the center of each of the two divisions of the lawn, the bed on the side of the house being filled with plants having ornamental foliage. The five beds on the right, and these being in full view of the street, were occupied with flowers, mainly of Annuals, with a few common Perennials, furnishing abundance of flowers for cutting. Conspicuous among Perennials we noticed the Flowering Pea, so seldom seen in America. Directly back of the house we observed a bed of fine Cos Lettuce and some other vegetables, and at the extreme back of garden a little lean-to conservatory, while opposite, on the right, was a hot-bed or cold-frame.

Fig. 2 shows a lot of larger size, with side road to small carriage-house, and an open space



OVER-PLANTED.

in front for convenience in moving carriages or any ordinary work. The road is screened from the lawn by tall shrubbery. If thought desirable, one of the oblong flower beds may be used for a permanent hedge to screen the back

part of the garden, say of *Arbor vitæ*, or a trellis covered with some climbing plant, would answer well for this purpose.

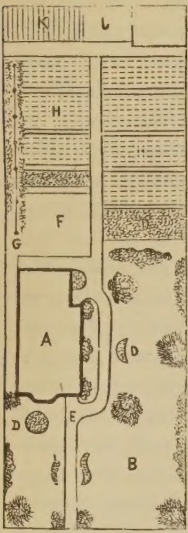


FIG. 1.

Lot 50 by 150 feet. about it.

Fig. 4 is the same width as Fig. 3, but not so deep. It is designed for a corner lot, so that an entrance to the house can be had from two streets, if desired, while from the barn there is a broad roadway to the side street.

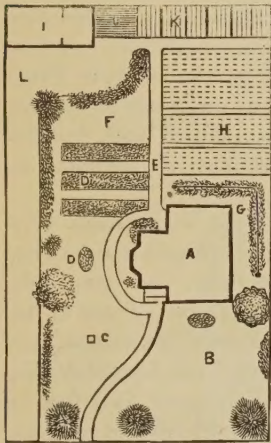


FIG. 2.

Lot 75 by 125 feet.

eminently proper in suitable places, but in small lots should not be attempted. A curved walk should be natural, the grounds showing a necessity for the curving,—be broad, well-filled with good gravel, and kept neat and clean. We often see narrow walks looking like threads winding about the lawn, while others are only half filled, being several inches below the surface, and looking like old water courses.

In MAKING A LAWN everything should be done in the most thorough manner, because if well made it will last for a generation. Have the soil spaded, or plowed deep, thoroughly pulverized and enriched with good stable manure, |

well-rotted, if possible. Mark the roads with care, setting stakes at the lines. Then remove the soil to the depth of eighteen inches,

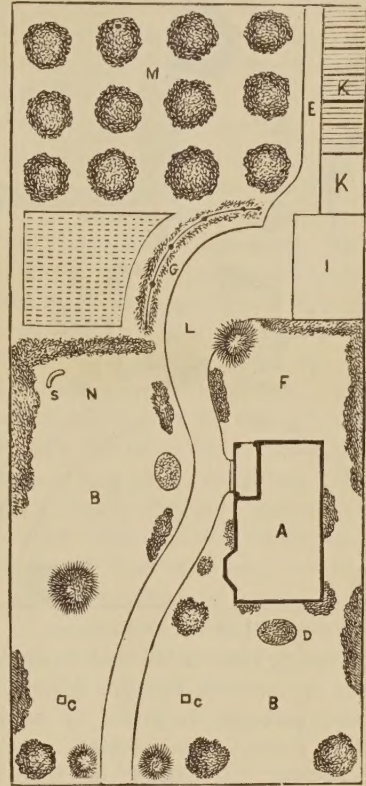


FIG. 3.—LOT 100 BY 225 FEET.

and this surplus soil may be used for leveling the surface of the lawn. Gather up all stones, and lay them in the excavations for the walks. After the surface is made perfectly smooth, and all stones removed with the rake, lay an edging of turf on each side of the walks, removing the earth so that the turf will not be above the level of the lawn. Then you are prepared to sow grass seed at the rate of four bushels to the acre. Kentucky Blue Grass, with a little White Clover, about a pound to the acre, and a few ounces of Sweet Vernal Grass, will make a good lawn. The Blue Grass ranges from \$2.00

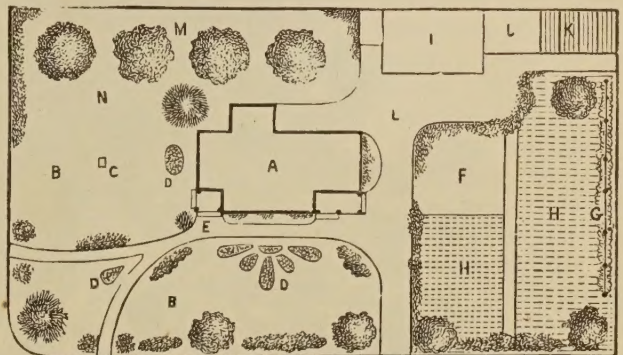


FIG. 4.—LOT 100 BY 175 FEET.

to \$3.50 per bushel. Its present price is \$2.00

FLOWERS AND FLOWER-BEDS.

WHAT we wish to teach the people is how to make a fair show of flowers at a comparatively small cost of labor and money. Fortunately, in this country, there are few excessively rich and few extremely poor. The good things of the world are pretty evenly distributed. Our people have their modest homes, in the country, and in the suburbs of our cities and villages, surrounded with little patches of garden ground, which they can adorn with the choicest floral treasures. They may not be able to obtain the elegant Palms, or other exotics, but enough of beauty can be had for a few shillings or dollars to satisfy the most ardent devotee of Flora. Beauty is cheap, almost as free as air and water.

For many years what is called the "bedding" system has been fashionable—that is, the arrangement of plants in beds usually made on the lawn by removing the grass. The plants for this purpose are, of course, constant bloomers, or those with ornamental

patterns," and the effect, when well done, and on a large scale, is wonderfully striking. When beholding exhibitions of this kind in Europe, we have been filled with wonder, and could hardly realize that such a blaze of glory was produced by foliage and flowers.

This kind of gardening is somewhat expensive, as will be seen by the following figures: A circular bed, ten feet in diameter, with the plants six inches apart, will contain one hundred and fifty plants, and those suitable for such purposes usually cost \$10.00 a hundred, so that the plants for such a bed would cost more than \$15.00, and not yield the grower a very great profit either. Small-growing plants require to be set as near as four inches, and this more than doubles the number of plants. One of our neighbors, Mr. AARON ERICKSON, made, the past season, one of the finest carpet beds we have ever seen in this country.

It was circular, twenty feet in diameter, of intricate and delicate pattern, well carried out in every particular, and contained two thousand plants.

Well, what shall we do who cannot afford such luxuries, or who are in situations where we cannot obtain the plants, even if money is not lacking. Not the least difficulty: for twenty-five cents you can get *Petunia* seed enough for several beds, or *Phlox Drummondii*, or *Portulaca*, or any of the other constant-blooming flowers, while, for a few dollars, invested in roots of *Caladiums*, *Cannas*, and other large foliage plants, with a few seeds of *Ricinus*, a bed can be made of tropical grandeur. Such a bed we observed all last summer, on the lawn of GEORGE J. WHITNEY, Esq., on State-street, in the north part of our city. From the first of June until November it attracted the attention of all passers. We sent our artist to make a sketch of this bed for the benefit of our readers. The first, or lowest row of plants are *Centaureas*, the second *Coleus*, the third row, with large leaves,



BED OF LARGE FOLIAGE PLANTS.

foliage. The plants most commonly used have been the scarlet *Geraniums*, the *Coleus* and *Centaurea*, the two last with ornamental leaves. Latterly, it has been usual to work these foliage plants into various designs, called "carpet

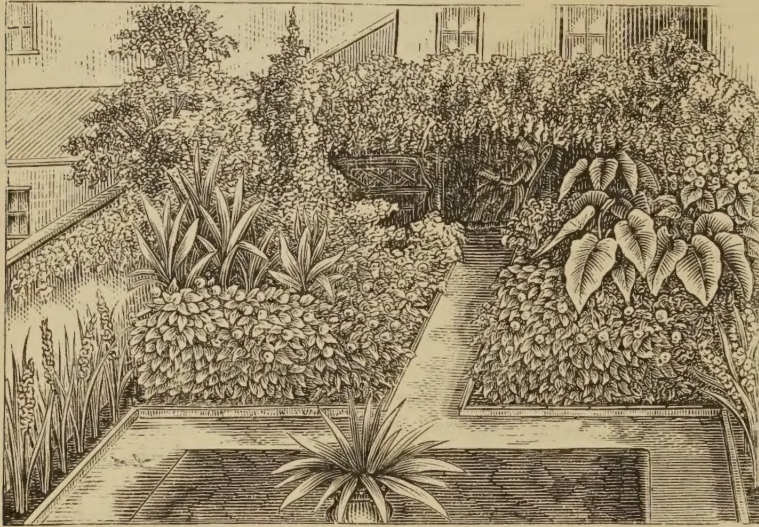
Caladiums, the fourth *Cannas*, and the center *Ricinus*, or Castor-oil plants. The *Centaureas* and *Coleus* can be obtained of most florists at ten cents each, the *Caladium* roots at fifty cents each, the *Cannas* at twenty-five cents each, and

a ten-cent paper of Ricinus seed will be quite enough for the center. The Ricinus requires just such treatment as Indian Corn,

of planting. Cannas, Ricinus, Caladiums, Coleus, Dahlias, Gladiolus, &c., do all very well in a city yard, and with some care taken

in planting them a very fine effect can be produced, even on a small scale."

After a good many years of popularity, during which the bright scarlet beds of flowers secured almost entire possession of our lawns, there came a change in public taste, and writers began to ridicule what they called the *scarlet fever*. This caused the introduction of the more modest and beautiful succulent plants, which certainly possess very great ad-



A NEW YORK CITY FLOWER GARDEN.

but when used for the center of a bed, it is well enough to start them in pots, so as to give a little start of the other plants. A bed of a very similar character we observed in the yard of the Optical Institute, in this city.

"It is pleasant to read your books and dream of the country," writes a correspondent, of New York City, "and what can we poor folks do but dream, who are shut up between brick walls, with only perhaps twenty feet square of back-yard?" Do! why almost anything that is undertaken with a will. Only a short time ago we received a photograph of a garden in "the heart" of the great city, and we have had it engraved to show our correspondent that something can be done besides dreaming about gardens, even in the great metropolis. The sketch was accompanied with the following remarks: "I enclose a stereoscopic view of a back yard, 18x30 feet, showing what can be done in the way of beautifying a home, even in the heart of the city of New York. At a very small outlay for bulbs and seeds, we had flowers all summer, and were never at a loss for the material to make up a very fine bouquet. The yard has been admired by every one who has seen it, and from a distance had the appearance of one vast bouquet of flowers and variegated foliage. The sub-tropical system works much better in a place like mine than the ribbon or other systems

vantages for an English climate, abounding, as it does, in rains and fogs, sadly disfiguring the Geraniums and Verbenas and Lobelias, while the succulent plants, like the Agaves, and Echeveria, and Sedums are affected by neither rains nor storms, nor burning suns.

Nearly all our readers are acquainted with some of the more common succulent plants, such as the Houseleek or Live-for-ever, and Sedum or Stone-crop, and from these can judge of the neatness and beauty of a bed mainly composed of the choicest of this class of plants. Small specimens of the Century Plant are often used for the center of the beds, as well as the Yucca; and small Cacti produce a very good effect in almost any position. The accompanying engravings, selected from the *London Garden*, will, with the list of plants of which they are composed, give a pretty correct idea



FIG. 1.

of this style of bedding now becoming so common in Europe.

FIG. 1.—Center, Echeveria metallica; ground

covering, *Sedum* and *Alternanthera*; next, *Eche-*



FIG. 2.

vera agavoides; then, *Pachyphytum bracteatum*; circle, *Sempervivum californicum*; margin, *Echeveria glauca*.

FIG. 2. — Top, *Echeveria metallica glauca*, agavoides, californica; angular margin, *E. glauca*; circle, *E. secunda*; center, *Sempervivum tabulaforme*; ground covering, *Sedum*.

FIG. 3. — Top, *Agave*; ground covering, *Sedum*; margin, *Echeveria secunda*.

From the above lists, as well as from other facts, we observe that an effort is made to secure as much variety as possible with this class of plants, both in form and color, and the lack of variety seemed to be the great fault with most of the beds of succulent plants that we noticed in Europe. While we do not expect that our people will engage very largely in this style of ornamental gardening, we thought it well to represent the different styles of bedding, so that all may know the changes and improvements in garden art.

"Bedding" will be continued with variations, occasioned by time and circumstances, longer than any of us shall live and love the flowers, and while this system gives enduring neatness, to which promiscuous planting can make no claim, it

also imparts a stiffness from which the latter is entirely free. We like both styles, and after tiring of the formal beds, turn with the greatest pleasure to those composed of herbaceous and other flowers, where each plant has a character of its own, and where, though we do not always find a grand display of bloom, never fail to observe something of interest,—a new flower opening when least expected; some surprise awaiting at almost every view.

Raised beds, as shown in the English engravings, we would not recommend, except for Rockeries, or in some particular locations. They are formal, and have a pretentious appearance out of all harmony with the usual surroundings. A view of only one side can be obtained at a time, while, with a bed but slightly elevated in the center, a bird's-eye view can be had of the whole, and this is altogether the best view that can be obtained of a bed of this character. In the lowlands of Holland, or



FIG. 3.

the moist atmosphere of England and Scotland, there may exist some necessity for such practices, but in our dry climate we cannot but feel that plants so situated must be uncomfortable.



THE DAHLIA.

THE genus *Dahlia* comprises but few species, all natives of the mountains of Mexico, whose range is from 5,000 to 10,000 feet above the level of the sea. About one hundred years ago a Spanish botanist introduced seeds of the *Dahlia* into his native country, and named the genus in honor of a Swedish botanist, DAHL. The first seed imported seemed to be variable and not very promising. About seventy years since, HUMBOLDT sent fresh seed to Germany. Soon after this both seeds and bulbs were introduced into England and France, and began to attract considerable attention, some enthusiasts being rash enough to hazard the assertion that "there are considerable reasons for thinking that the *Dahlia* will hereafter be raised with double flowers."

About 1812 probably the first double *Dahlia* was grown, but for several years after this both double and single varieties were figured in



SINGLE FLOWER.

colored plates, and exhibited at horticultural shows. That the single varieties were prized is not strange, for the double were not very good, and even as late as 1818, published figures showed very imperfect flowers.

The improvement of the *Dahlia* after this was rapid, and its popularity quite kept pace with its improvement. *Dahlia* exhibitions were held in England and on the Continent, which were crowded by enthusiastic admirers of this wonderful Mexican flower. For many years the *Dahlia* maintained its popularity: but there is a fashion in flowers, as in almost everything, and for a time the *Dahlia* became, to a certain extent, unfashionable. And this was well; for it placed the flower upon merit alone, and growers were compelled to introduce new and superior varieties to command either attention

or sale for their favorite flower. It seems now to be assuming its former place in public estimation, and at this we are not surprised, for a



SHOW DAHLIA.

well-formed *Dahlia* is a wonder of perfection. In our colored plate we have endeavored to give portraits of a few good kinds, omitting some very excellent, large flowers, on account of their size.

A taste for old styles is now the "correct thing," and so we have imitations of ancient earthenware, furniture, etc., and import *original* Chinese Aster seed, and also obtain roots of the single *Dahlia* from Mexico, and the engraving of one of these will show the character of this flower when first carried to Europe.

It would not be profitable to occupy space with a long list of varieties, which can be found in the catalogues of seedsmen and florists, and our remarks will therefore be confined to a description of the classes into which this flower has become divided through the care and skill of cultivators. There are three pretty distinct classes, the *Show Dahlias*, the *Dwarf* or *Bedding*, and the *Pompon* or *Bouquet*, and to this we may add the *Fancy Dahlia*. The *Show Dahlia* grows from three to four feet in height, and embraces all our finest sorts, fit for exhibit-



DWARF DAHLIA.

ing at horticultural shows, from which the name is derived; the flowers ranging in size from two and a half to five inches in diameter. The striped and mottled and spotted varieties

belonging to the Show section are called *Fancy*, and though not as rich nor usually as highly prized as the selfs, or those of one color, are very attractive. The



POMPON DAHLIA.

Dwarf or *Bedding Dahlia* grows about eighteen inches in height, and makes a thick, compact bush, and covers a good deal of surface; flowers of the size of Show Dahlias. They are, therefore, very desirable for bedding and massing. The *Pompon* or

Bouquet Dahlia makes

a pretty, compact plant, about three feet in height. The leaves are small, and the flowers from one to two inches in diameter. Many expect to find small flowers on their Dwarf Dahlias, and feel disappointed because they are of the ordinary size, not knowing that it is the plant, and not the flower, that is dwarfed, and that only the Pompon gives the small flowers.

Generally, those who plant Dahlias purchase the tuberous roots, because they give good, strong plants, that flower freely without trouble or risk. The general appearance of these tubers, as sent out by florists, is shown in the engraving. They are smaller and better than the large, coarse roots, usually grown, because they are raised from cuttings, and generally form their roots in pots. When a tuber is planted, a number of buds that cluster around its top will push and form shoots, as shown in the engraving, and, if too numerous, a portion should be removed; indeed one good strong shoot will suffice, and then the plant will become a small tree instead of a bush. Even then, if the top become too thick, a little thinning of the branches will be of advantage. If the young shoots that start from the neck of the bulb are cut off near a joint and placed in a hot-bed, in sandy soil, they will root, form good plants, and flower quite as well as plants grown from the tuber; this, however, requires some care and experience, and amateurs generally will succeed best with bulbs.

New varieties of Dahlias, of course, are from seed, and every season we grow hundreds of seedlings. Some of them prove good, others

fair, and a portion utterly worthless. As a general rule, we would not advise amateurs to trouble with seeds, although there is pleasure in watching the birth and development of a new and beautiful variety. As will be seen by the following, which is only one of several similar requests, information is sought on this subject:

Please tell me how to raise Dahlias from seed. I had a great many beautiful ones this summer and saved a great many seeds.—MRS. L. C. B., *Russellville, Ky.*

The seed of Dahlias may be sown in pots, in the early spring or end of winter, in a light, loamy soil; they will germinate quickly, and as soon as they begin to show their second leaves they should be pricked out into other pots or boxes, so that they may have plenty of room and air—they are very liable to damp off if at all crowded. After pricking out they should be kept in a thrifty, growing condition, by proper attention to watering and temperature; the temperature should be maintained as near 70 deg. as possible, and the watering be sufficient to preserve a moderate moisture.

If the green-fly attack them it will be best to treat them to a very weak dilution of tobacco water; the young succulent plants are very



CUTTING ROOTED.

TUBER STARTED GROWTH.

sensitive to smoke and it is best not to fumigate them. In about two months the young plants should be large enough to pot off singly, or to be transplanted into a frame or bed, where protection can be given them from the cold of night-time or from late frosts. As soon as all danger of frost is past they can be transplanted into their summer quarters, and should stand at least three feet apart. The soil where they are to grow should be rich and mellow. In August they will come into flower, and those having blooms worthy of cultivation can be retained and the others destroyed. Only a small proportion of the plants grown from common seed produce flowers equal to those now in cultivation, and we have known whole beds to be entirely worthless; but when seed is saved from a choice collection of named varieties the chances are that a large proportion of the plants will produce very good flowers. Fortunately, we have just received the experience of a lady in growing Dahlias from seed, who possessed no more advantages than are enjoyed by most of our readers; and we are quite sure that with



DAHLIA ROOT.

such success our Iowa correspondent must have obtained seed saved from very perfect flowers. Perfectly double Dahlias give few seed, while in poor flowers it is abundant.

MR. VICK:—I received from you last January a packet of Dahlia seed, thirty in number. I planted them the first of February, and in a few days twenty-four of the thirty seeds came up. When they got the third leaf I put each one in a little pot by itself, and gave them all the sunshine the house afforded; four of them died. The last of May I set them in the yard, where they grew nicely and all bloomed but one, and it had buds on when the frost came. Of the nineteen that bloomed no two were alike. They were of all shades, from pure white to very dark maroon, one deep scarlet, and all very double. When I took them up in the fall they all had good large tubers, except the white one. I named them all with the prefix VICK; one I called VICK'S Perfection. Many of my neighbors came to see my seedling Dahlias.—P. P., *Leon, Iowa.*

While we would like to encourage the

growth of Dahlias from seed, and admit that in the work there is pleasurable excitement, those who wish flowers can obtain them at a far less cost of labor, by purchasing a dozen or two of bulbs in the spring. The best are obtained at \$3.00 a dozen, or \$20.00 a hundred. They need not be planted early, for the Dahlia is an autumn flower, and will not give perfect blooms until the cool, moist nights of autumn. For this reason the Dahlia is particularly valuable, as it gives us abundance of flowers for large work, such as table bouquets and other floral ornaments, at a season of the year when, with the exception of a few annuals, flowers are exceedingly scarce. The flowers in our colored plate are taken from named varieties, and designed to represent the different classes, and to show the varieties in size, form and color.

THE CARNATION AND ITS CULTURE.

THE Carnation is one of the sweetest flowers we possess, and under the name of Carnation or Picotee, or Clove Pink, or English Garden Pink, is known and loved by everybody. Florists make very nice distinctions between the Carnation, Picotee and Pink, and very arbitrary rules for the guidance of those who are called upon to judge officially of the merits of these flowers. Indeed, the "points" of a perfect Carnation are as clearly defined as those

In a good Picotee the edges of the petals are also smooth, and usually ornamented with a narrow band or edging. The flower of the Pink is smaller, more compact, ground white, often with a broad band at the edge of the petals, and a blotch at their base. All have a delicate, clove fragrance. The characteristics of each we have shown in the engraving.

In Europe the distinctions mentioned are well understood, even among intelligent amateurs; and some of the most skilful growers of the Carnation are not professional florists. Indeed, we have often had a private gentleman or merchant pointed out to us as "One of our best Carnation growers." A good many people of taste, and not always among the wealthy, make a "hobby" of Picotee and Carnation growing. We may as well admit at once that the Carnation is not as well suited to our climate as to that of England, for our summers are quite hot and dry enough, and the winters too severe. The fine imported varieties prove too delicate, constitution having been sacrificed to beauty of flower. We can, however, grow good hardy seedlings, which, though they may not reach the florist's standard of excellence, will give abundance of flowers, fragrance and pleasure; and there are very few things better for a button-hole flower. Our colored plate is designed to show just what we can do without special trouble or skill, as it is the product of an ordinary package of Carnation seed, costing twenty-five cents, with the exception of almost the same number of less perfect or entirely single flowers which were destroyed.

While engaged preparing this plate, a copy of the *Providence Journal* came to hand, containing a pleasant description of a bouquet of



CARNATION.

of a prize animal. The petals of a good Carnation must be firm, smooth at the edges, of one solid color or striped, and these broad and unbroken from the base of the petal to its edge.





Lithographic & Chromo Co. of Rochester N.Y.

CARNATIONS & PICOTEES.

Carnations received by the editor, followed by a letter from H. C. BROWN, of Tiverton, R. I., who wrote, "The Carnations I presented



PICOTEE.

to the editor were grown from two packages of seed, sown last year. I had sixty varieties, some single, but a good portion of double. They have bloomed profusely, and have been much admired. I must have had between two and three thousand blossoms." We give this to show that success is not unusual.

Carnation seed will germinate most readily in a gentle hot-bed; though, as the weather becomes warm, a cold-frame, or even a sheltered bed or boxes, in the garden, will answer for starting the seed. It is not necessary to sow early, because plants will not flower until the second season, and they will do this if seed is not sown until June, or even later. Shield the bed or boxes from the mid-day sun.

When plants are an inch or two in height, transplant to the bed for blooming. In the autumn it is well to throw a little manure over the roots, but do not cover the tops, though a few evergreen branches will do no harm and afford protection from the winter winds. In July, the second season, abundance of beautiful flowers will repay the cultivator for all care.

Among the plants, when in flower, will be found some of superior merit, and these it will be well to propagate. This is done by what is called *Layering*. After flowering is about over there will be found a goodly number of young, thrifty shoots that have borne no flowers. Select a few of these and make a cut midway between two joints. First cut half way

through the shoot, then make a slit lengthwise to a joint. Remove the earth a few inches in depth, and press down the branch so that this slit will open, and then cover with the soil.



LAYERED PLANT.

Roots will form where the cut was made, and thus a new plant will be formed, which can be removed in the autumn or spring. Layering is done in midsummer, and we have endeavored to make the operation plain by the engraving. There are two advantages in this method of propagation,—good varieties are rapidly increased, and the stock is kept young and



PINK.

vigorous; old plants become feeble, and are usually injured and often destroyed during the winter. Plants that will flower the first season can be purchased in the spring at about fifty cents each, and less by the dozen. These will be all good sorts, as florists do not layer inferior kinds.

A class of Carnations, called Tree or Ever-Blooming, are particularly suited to winter-flowering, and require entirely different treatment. This section we shall give some attention in a future number.



FLOWER CHATS.

I wonder why we do not see the Catalanian Jessamine in conservatories and window-gardens oftener than we do? I know of nothing more desirable where a flowering climber is wanted. It grows rapidly, has beautiful foliage, and its pure white flowers are of the most delicious fragrance. They are borne profusely from January to June, and each one is a house full of fragrance in itself. When not in blossom the plant is very ornamental, as its light and airy foliage gives a charming effect when trained along the green-house rafters, or about the window. Indeed, I know of no other plant



JASMINUM GRANDIFLORUM.

combining the three-fold merits of flower, foliage and fragrance, in the same degree of perfection as this Jessamine. It is often mistaken for Smilax in my conservatory, where I have it trained along the rafters. It is easily grown, liking a compost of one-half pasture-mold, taken from the under side of sods, and full of the fibrous roots of grass, one quarter rich garden mold or well-rotted manure, and one quarter clean sand. My plant grows rapidly, and is never troubled with insects. Perhaps the red spider would annoy it if I did not keep the air moist.

Another plant we seldom see in collections is the Olive,—the *Olea fragrans* of the catalogues. In making out a list of plants last spring I included this. My plant was about

six inches high when it came, and its thick, dark-green leaves resembled a Camellia most of anything. I examined the roots, and found they were few and stout-growing, and concluded that it needed a stiffer soil than that recommended for the Jessamine, so I left out part of the pasture soil and substituted garden-mold in its place. For a long time the plant did not seem to grow. One day I noticed a light green bunch on the end of one of the branches, and concluded it was going to make a start. As I was moving my plants when I made this discovery, I put the Olive in a corner where it was partially hidden, and forgot about it. One day, about two weeks later, I noticed a peculiar and delightful fragrance on going into the conservatory. It was something like a combined odor of peaches, musk and violets, if such an odor can be imagined. I went to investigating, and on moving the Olive I discovered where the perfume came from. Down among the dark leaves was a little cluster of white flowers, so small as to be hardly worth calling flowers, if size were the standard, and from these came the most exquisite fragrance I have ever known. What I had supposed to be new leaves were buds, and one cluster, not as large as a three-cent piece, was powerful enough to fill the whole room with fragrance. Now the plant has a dozen clusters on it, and when the doors between the conservatory and parlor are open both rooms are filled with its rich odor. It is more subtle than the Heliotrope scent, and much sweeter.

Another plant with which I am much pleased is *Campsidium filicifolium*. It is a rapid grower, a climber, and has elegantly-cut, fern-like foliage; quite unlike any other plant I know of. It has no need of flowers, for its leaves are beautiful enough in themselves to make it a favorite. It branches freely, and is easily managed, growing in ordinary soil, and is not very particular about the amount of sunshine it gets.

I wish those who love flowers would try the three plants I have spoken of above. — EBEN E. REXFORD, *Shiocton, Wis.*

HEAT AND FLOWERS.

MR. JAS. VICK:—A lady correspondent of yours, Mrs. Dr. WOODWARD, of Elmira, N. Y., writes, in the January number of your beautiful MAGAZINE, about the strange conduct of an Oleander. Having had frequent experiences of a similar nature with that plant, and made experiments with it which, I think, led me to a discovery of the true cause of the phenomenon, I will venture to give my theory, which, I think, is based on true philosophic principles, having been attained through actual observation and practical experience.

For the development of blossoms a plant requires a greater degree of warmth and moisture than it does to develop leaves or branches, and for the perfection of fruit it requires still more. The Oleander very frequently forms buds late in the fall, which will lie dormant all winter, the foliage and branches still continuing to grow, and in the spring, when circumstances of air, light, warmth and moisture have become sufficiently propitious, expand into full-blown flowers, which then appear, as Mrs. W's. did, stuck in the midst of leaves and branches all around them. The buds which Mrs. W. thought shrunk merely remained in *statu quo*, simply appearing more and more diminutive as the leaves and branches grew around them.

The Oleander is a plant that will bloom at any season of the year, under sufficiently favorable circumstances. If I am not growing too tedious I will give you a similar, though not exactly parallel experience with another class of plants, the Amaryllidæ. A good many years ago, when living in Europe (we always were passionate amateurs,) we cultivated the Amaryllis as a special pet. One fall we potted several *A. formosissima*, one *A. vittata* major, and one *A. Johnsonii*, all very fine, large bulbs. We placed them all together in the warmest place in the sitting-room; all the pots placed in saucers, watering them abundantly, only in the saucers. About the middle of January all the *A. form.* showed bud—the buds of nearly all Amaryllis appear before the leaves—and by the middle of February most of them were in full bloom. The *A. vit. maj.* showed bud by the middle of February, and towards the end of April had shot up a flower-stem two feet six inches high, with six magnificent flowers on top, either one of which was as large as the most perfect *Lilium candidum*; color white, with deep crimson-purple stripes on each petal, and delightfully fragrant. The *A. Johnsonii* showed bud about the same time as *A. vit. maj.*, but after coming about one-third or two-thirds out of the neck of the bulb it stuck there, the leaves, however, coming out vigorously, and

making a healthy, luxuriant growth. The bud stuck there through the whole spring and summer, finally shriveling and drying up when the leaves decayed. We repeated the same process for three successive years, with the same varieties, and with exactly the same success, attributing the failure with *A. Johnsonii* to some constitutional defect in the bulb. The third year, a gentleman friend of ours who possessed a hot-house, and to whom we told our tale of woe, recommended us to sink our *A. Johnsonii* pot in his tan-bark bed in the hot-house, where he forced his Pine Apples. We did so the next fall; when, lo and behold, by middle of April next, we took *A. Johnsonii* home, with five magnificent blooms, expanded on a stalk about two feet high. Since that we have known of similar experiences with *A. belladonna*, *A. regina*, and *A. longifolia*. These varieties will only develop their bloom under such circumstances of warmth and moist air as they find in the forcing-bed of a hot-house, or in the atmosphere of their native clime, but their leaves will develop under less favorable circumstances.—C. L. PERRY, *Lincoln, Mo.*

This explains quite clearly the cause of a good deal of disappointment—plenty of leaves but no flowers.

FLOWERS IN TEXAS.

MR. VICK:—I see in the last number of the GUIDE, a letter from a lady in Kansas, in which she speaks of the *Datura* being the farmer's dread in a wild state. I think she must be mistaken, for we have the same weed in Texas, but it is the "Jamestown Weed," and grows luxuriantly here. I have grown a *Datura* this year for the first time, and although you praise it, it is "tame praise for such beauty." It equals our lovely *Magnolia* in beauty and fragrance. I do wish every lover of flowers would grow the *Vinca*; it is absolutely faultless. I have succeeded well with flowers, this being my first attempt, and having the scourge of grasshoppers to contend with. *Vinca*, *Antirrhinum*, *Asters*, *Petunias* and *Verbena*, try to excel each other, not forgetting the *Abronia* and *Nolano*. The more delicate flowers will not do in this dry, hot climate. Tulips do not do well, I think, in this place, for they come up and grow strong, but give no flowers; yet many wild bulbous flowers grow here. But I am not discouraged and will try again. *Antirrhinum* and *Abronia* will not seed here. *Hyalcinths* do well; mine bloomed twice during the spring, so I feel more than repaid for my labor.—A. R. KERN, *Walden, Texas.*

The Jamestown Weed is *Datura Stramonium*, and although it frequently springs up and spreads over waste grounds, it is easily subdued by mowing or cutting it down just before coming into flower.

NATIVE FERNERY PLANTS.

Some time since we published the following remarks from a lady correspondent—"Contrary to the teachings of at least some of the books, the Trailing Arbutus (*Epigæa repens*,) can be brought into bloom at any time during the Winter. I have had bountiful bunches of flowers at Christmas. The simple plan is to take them up late in the fall—December will do if the ground is open—and plant them in a Fernery or Wardian case. They will take care of themselves. The common ferns of the woods, too, will push up, and unroll their fronds, the scarlet berries of the Wintergreens and the Partridge berry will swell, and remain fresh all winter, and the Evergreen vines of the woods will grow as if it were spring. I always go to the woods for the contents of my fernery." This caused a good many inquiries, which will be answered by the following:

DEAR MR. VICK:—Your publication of my letter about the Trailing Arbutus and other wild contents of the fernery, has brought me such a number of inquiries that, if you have no objection, I will answer them all through the medium of your MAGAZINE.

Trailing Arbutus thrives best in rich woodland, not too much shaded, but will also grow and bloom on dry, gravelly knolls. The proper time to take it up for the fernery is in October, November and the beginning of December. By that time it has fully formed its flower buds, and plants can be selected which will be certain to bloom, if properly cared for. In the fernery it seems to do equally well in leaf-mould and in good garden soil, forming congenial company for the ferns themselves.

As to the other contents of my fernery, of course, the principal members of the happy family congregated there are the plants from which it takes its name. A few of the coarser varieties are evergreen, and when transplanted to the fernery give it beauty at once; especially desirable is the Shield Fern, (*Aspidium acrostichoides*,) which may be had of any height from one inch to a foot or more. The roots of the others are taken up, buried in the soil of the fernery, and early in the winter begin pushing up and unrolling their curious, graceful fronds. The different kinds are adapted to all sizes of glass, from the stately Cinnamon Fern, (*Osmunda cinnamomea*,) nearly as high as a man, to the smallest Spleenworts, (*Aspleniums*,) of only a few inches in height, or the beautiful Climbing Fern, (*Lygodium*,) which may be trailed on the ground or twined about a column. Those who have room enough, however, will probably find most satisfaction in a clump of the delicate, branching Maiden Hair, (*Adiantum pedatum*,), of which WOOD says, "doubtless the most beautiful of all our ferns." This grows from twelve to fifteen inches high, and should be placed in the center. The corners might be filled with the feathery fronds of the Mountain Fern, which grows nearly as high.

While on this subject, let me add, that the fall months are also the time to take up ferns for out-door planting, and that no better or prettier filling can be found for densely shaded places; while the largest of them will also do well, and look well, out in the blazing sunshine of the lawn.

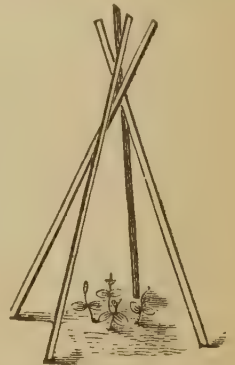
Another great favorite with me is the Partridge Vine, (*Mitchella*,) Its dark green leaves, intermixed here and there with bright red berries, have a charming effect when displayed in the moss with which the earth of the fernery should always be hidden. It "sets the thing off" at once, and when, later in the winter, the small, fragrant, pinkish-white, *twin* flowers appear, it doubles its beauty.

Other pretty things, which may be used, are the Ground Pines, (*Lycopodium*,)—the Tree Club Moss, (*L. dendroideum*,) being the best,—and the Wintergreens, (*Pyroleæ*,) all of which are evergreen, and some carry bright colored berries through the winter, while others push up bunches of fragrant flower-bells in the miniature summer of the fernery. The crimson tips of some of the wood-mosses may also be used, if an additional dash of color is needed here and there.

I think, too, but have not fully proved, that our early spring flowers—Anemones, Liverworts, Solomon's Seal, Indian Pink, (*Polygala paucifolia*,) and the rest, may be successfully cultivated in this way.—H. C. SHEAFER, *Pottsville, Penn.*

A CHEAP PLANT SUPPORT.

FRIEND VICK:—I have been using, this season, an exceedingly cheap and practical substitute for poles and trellis to support climbing plants and vines, and enclose a photograph of it herewith. For four hills it takes four lath or strips, or poles, of the desired length, and two shingle nails. It saves the setting of the poles, lighter and more slender stuff is available, it can be put up after the plant begins to run, it is adjustable to any distance between hills, and needs to be set in the ground only deep enough to prevent slipping; it offers very little resistance to wind, and the vines hold it in place after they begin to climb. The vines form a hollow pyramid, produce more pods or fruit, with better facilities for growth and maturity, than when trained on single poles. The mode of construction is to place two pieces,



say of lath, together even, at the end intended for the base, and drive a nail through them against a clincher, two to six inches from the top. Repeat with as many pairs as you want. Let these spread from row to row, and let every two pairs from hill to hill meet in the cross at top. A string, or bit of small wire may be needed to keep the tops in place. When the vines begin to overtop the pyramid, a cross-piece may connect pairs of pyramids in the direction of the row by simply resting in the forks of the cross, and the runners be trained to meet, if extent of vine is desired.

Another way is to take three laths or poles and two nails, and make a tripod. This can be spread to two hills in one row and one in the other, in alternation. This last is cheapest, and for low training is probably best. Cross-stretchers, by pairs in rows, of these trios, can also be used, and will render tying at the tops needless. For hops or grapes, or smaller garden or floral climbers, this device is available.

I offer this labor-saving, lumber-saving, and crop-improving, novel trellis free to the world.
—S. FOLSOM, *Attica, N. Y.*

MY FIRST EXPERIENCE.

BY AN OLD GARDENER.

I scarcely knew what it was to be a gardener before I came West. True, I had been in and about gardens for over thirty years, and had "run" some pretty large places, with extensive collections of plants in them, but that was in Europe, where everything almost is furnished to hand to do the work with. The idea of the West, with its boundless prairies and extensive forests, came across my brain, and I determined to see it, and try it before I became too old, and bring my children to a land where they would have more room than in crowded Europe.

My credentials procured me my first place, in a Reform School belonging to a celebrated western city, where my business was to teach young city Arabs how to grow flowers, cabbages, &c. — certainly not the best of material to make gardeners of; yet I did succeed in bringing out some few useful boys, and instilled a love for the beautiful in most of them. I took charge of the place early in February; there was a green-house that had been built and glazed in the frosty weather of the fore part of the winter, and part of the glass was replaced with old sheets of tin, as it had got broken during the season, and it takes quite a long length of red tape to get a few squares of glass in a public institution. The house was heated by a large drum stove, and when the thermometer went down below zero there was a nice struggle

between Jack Frost and the stove, to see which should have precedence over the plants. Still I worked on manfully, and came out ahead, with a good stock of plants for spring use.

I was told that everything raised would be for the use of the schools. Being "green" I put my soul into the work, and in the April following my introduction we had over one hundred sash (old windows) of nice Lettuce, and other things, in hot-beds. We had over three hundred boys, and two-thirds were touched with the scurvy; so I thought "what a nice thing it will be for the little waifs to have something to take it from them in the form of fresh vegetables, long before they can be got out of doors." When the Lettuce, Radishes, &c., were a nice size, the Superintendent had his friends who wanted some, and the Assistant-Superintendent had his friends, and some of the "city fathers" who were on the School Committee, had to have some; and I found that to supply them all we should need many acres. The boys' share was homœopathic; my own staff of boys did get some, for I shut my eyes, and "there are none so blind as those who won't see;" often they would eat roots and leaves together, merely shaking off the dirt, such was their craving for fresh vegetables.

We put out about half an acre of flowers, and when they were in "full blow," then the fun began, for from the highest to the lowest officer, all had "friends" to come and gather flowers. Their friends seemed to be multitudinous or more numerous than ants in an ant hill, and when there was ripe seed the friends seemed to multiply. At last I got indignant and threatened to leave. I had newly come from a place in Europe where nothing was allowed to be gathered without first consulting the gardener.

I was a little amused with some of the city fathers on the School Committee; their modesty was great. One had a barrel of potatoes and fifty head of cabbage, with onions and other vegetables, as a "sample," taken to his house in the fall; and by the time we had supplied them all with "samples" our stock from twenty acres of vegetables, for the use of the school, was small. I came to the conclusion at last that the boys would scarcely be bettered by such examples.

The vulgarity and meanness of the managers of some of our public charitable and reformatory institution have been beyond and below belief. Compared to men who would thus beg from the poor and pilfer from the unfortunate, the pauper is a prince and the thief a gentleman. Some of the noblest and most self-sacrificing men, and women, too, we have ever known, have been, and now are connected with institutions of this character. Let these receive all honor. Indiscriminate praise and blame have been the curse of the American people.



WARRANTED NOT TO GROW.

Some seedsmen in London who have not learned that honesty is the best policy, are in the habit of doing a very naughty thing. They obtain some cheap seed, like Charlock, or Wild Mustard, and mix one-quarter, or more, of this with good and costly seeds. In this way they are enabled to undersell honorable seedsmen, causing them a good deal of trouble and the loss of custom. To prevent any bad report at harvest-time, when the fraudulent seeds would show their true character, they are subjected to a roasting process which entirely destroys their vitality, and dead seeds, of course, tell no tales. To such an extent was this nefarious practice carried that seed-killing became almost an honorable trade, and many persons were wholly engaged in the purchase of worthless seeds, and subjecting them to this process. The respectable seedsmen have procured an act of Parliament making seed-killing and the selling of killed seed a criminal offence. For some months past the London papers have given us interesting accounts of the trial and conviction of these seed-killers, and the London Punch has been furnished by a countryman with a Poem on the subject, which we give on another page, illustrated by our own artist. Of course, nothing of the kind is done on this side of the Atlantic, and yet, it may be well to caution our readers to avoid all cheap seeds. The care required to grow seed pure, and the fact that choice flowers and vegetables produce seed very sparingly, while common, wild things seed abundantly, will prevent the good seed from becoming very cheap, and will always prove a temptation to the unprincipled to offer common and worthless stuff to the unwary, to the great injury of the purchaser as well as to the honest seedsman, who offers to sell at a fair price what he has grown with unremitting care, and knows to be good. There are few professions requiring such unremitting, self-sacrificing integrity as that of the seedsman. Perhaps it may be well to say that what seed-growers call a "rogue" is an untrue plant.

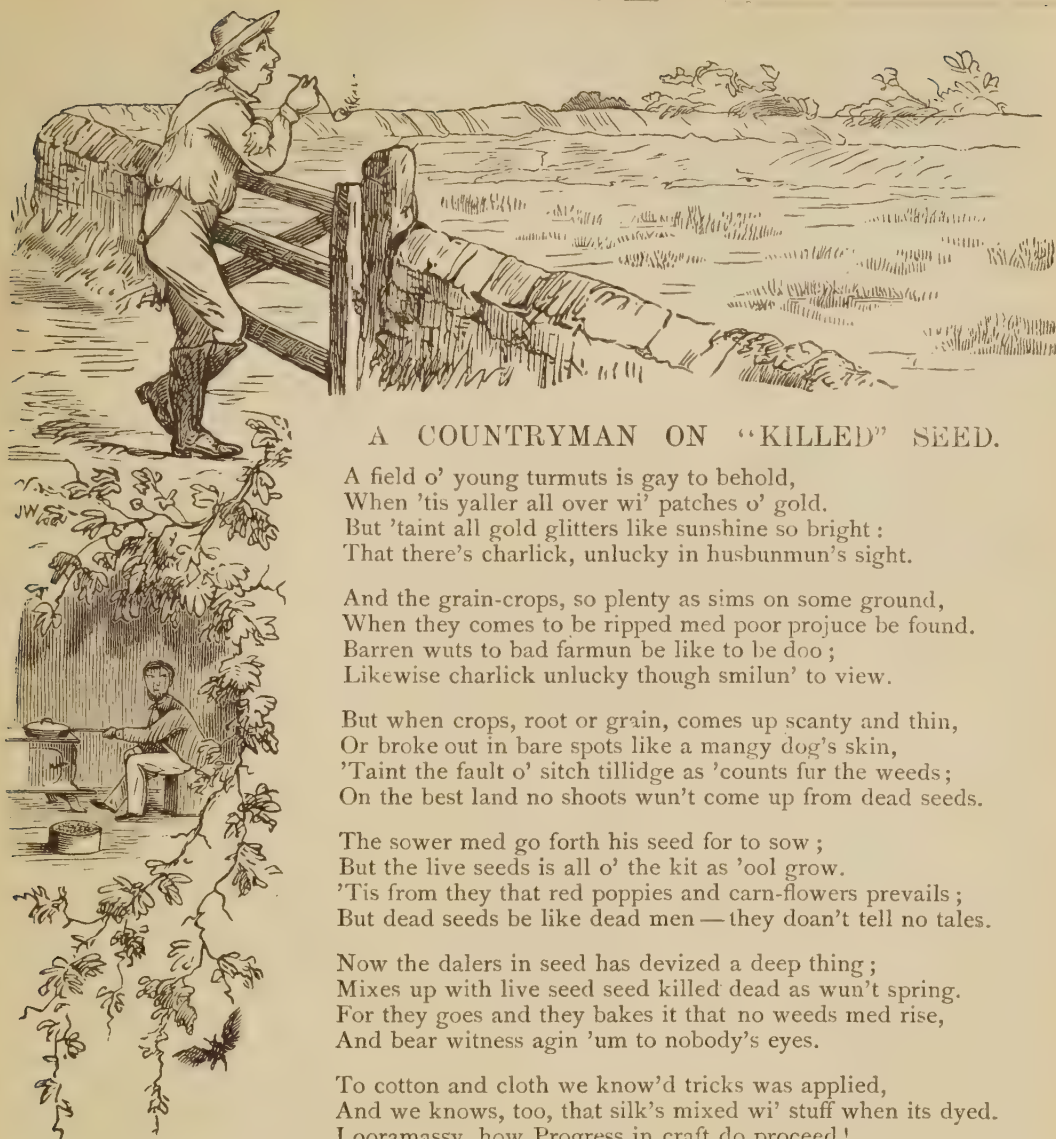
THE TOMATO IN ENGLAND.

The Tomato is beginning to achieve popularity in England. The climate is not warm enough to ripen it well, except in certain warm locations or exposures, and many are grown in France for the English market. We might send them a steamer load every week, but the Tomato cans so well that we have no doubt a brisk trade will spring up before long, that will gladden the hearts of our canners. It is a pleasure to know that we have furnished our English friends two of their best Tomatoes, the *Hathaway* and *Vick's Criterion*, both of which we forwarded to the Royal Horticultural Society for trial. The following is from the *Journal of Horticulture* (London,) and is accompanied by a large engraving of the *Criterion Tomato*, which we will at some time give our readers.

TOMATO OR LOVE APPLE.

This, *Solanum lycopersicum* of botanists, is thus noticed by the historian of cultivated fruits:—"It is a native of South America, and in all probability of Mexico, from whence it appears to have been brought by the Spaniards, who, as BARHAM observes, use it in their sauces and gravies, because the juice, as they say, is as good as any gravy, and so by its richness warms the blood. DODOENS, in his *Pemptades*, published at Antwerp in 1583, described it as growing at that time in the continental gardens, and says that its fruit was eaten dressed with pepper, salt, and oil." It appears according to the "*Hortus Kewensis*" to have been cultivated in England as early as 1596, and GERARDE mentions it in his work, which was published in 1597, as growing in his garden. PARKINSON, whose works were published in 1656, mentions it as being cultivated in England for ornament and curiosity only. For a long time, however, it has been grown for use as well as for ornament, and is increasing in esteem yearly. In America it is extensively cultivated, and much attention has been given there to the raising of improved varieties. Some of these have already become popular in England, such as *Hathaway's Excelsior*, *The Trophy*, and some others, which are remarkable for their smoothness and general good quality.

The engraving which accompanies these notes represents the most recent of the American varieties—namely, *Vick's Criterion Tomato*, which has been awarded a first-class certificate by the Royal Horticultural Society. This beautiful variety was raised by Mr. JAMES VICK, the well-known seed grower of Rochester, New York. It is a very prolific well-shaped variety with smooth skin, very distinct in color, the fruit being of a cornelian red. The seed has been placed in the hands of Messrs. JAMES CARTER & Co. for distribution.



A COUNTRYMAN ON "KILLED" SEED.

A field o' young turmuts is gay to behold,
When 'tis yaller all over wi' patches o' gold.
But 'taint all gold glitters like sunshine so bright :
That there's charlick, unlucky in husbunmun's sight.

And the grain-crops, so plenty as sims on some ground,
When they comes to be ripped med poor projuce be found.
Barren wuts to bad farmun be like to be doo ;
Likewise charlick unlucky though smilun' to view.

But when crops, root or grain, comes up scanty and thin,
Or broke out in bare spots like a mangy dog's skin,
'Taint the fault o' sitch tillidge as 'counts fur the weeds ;
On the best land no shoots wun't come up from dead seeds.

The sower med go forth his seed for to sow ;
But the live seeds is all o' the kit as 'ool grow.
'Tis from they that red poppies and carn-flowers prevails ;
But dead seeds be like dead men — they doan't tell no tales.

Now the dalers in seed has devized a deep thing ;
Mixes up with live seed seed killed dead as wun't spring.
For they goes and they bakes it that no weeds med rise,
And bear witness agin 'um to nobody's eyes.

To cotton and cloth we know'd tricks was applied,
And we knows, too, that silk's mixed wi' stuff when its dyed.
Looramassy, how Progress in craft do proceed !
There 's a species o' shoddy now mingled wi' seed.

Rogues be rogues, to be sure, sitch and all o' one strain ;
But the wust rogues for farmers be them rogues in grain.
To chastise such offenders no fines won't prevail.
For their potion I'd gi'e 'em hard labor i' gaol.

In the good times of old, rogues like they, up and down,
At the cart's tail 'd been properly whipped droo the town,
And then set in the stocks their misdeeds to requite,
Or stood in the pillory, and sarve 'um aright.

For the tricks o' the Seed Trade 'oodst make theeself match ?
Thee goo, and thee get thee an old flannel patch
From out of a blanket the Missus med spare,
Or a pettiket as she no longer med wear.

Soak in water loo-warm, nigh the vire let 'a stand,
Then a hot-bed in little thee 'st got to thy hand.
Sow thy seeds in 't, all counted ; the live uns 'ool sprout,
By the dead, which they won't, the deceiver's found out.

Whensoever I that there experiment tries,
'Tis from few seed I finds as e'er sprouts fails to rise.
For I knows honest folks, and I dales where I knows :
That's the way for a feller to rip as 'a sows.

AMERICAN FLOWERS IN GERMANY.

Occasionally we seek a little cheap pleasure in our own way, and are seldom disappointed. From the grasshopper regions, from the Missionaries in India and China, and among the Red Men of the West, from even the mountains of Switzerland, and the fertile plains of Fatherland, we receive full pay; not exactly in Bank Drafts, but in drafts of gratitude; not in gold sovereigns, but in golden opinions—all too good and undeserved, but, after all, pleasant. We must let our readers have a little share, so copy the following from a letter dated Dayton, Ohio, Sept. 22d, 1877:

MR. JAMES VICK:—*Dear Sir*:—I received during this year many a letter from my sister, Mrs. E. P., at Leipzig, Germany, about the flowers she raised from bulbs and seeds which you sent her. In all these letters she expresses the highest satisfaction and gratitude. In her last letter, dated Sept. 2d, 1877, she reported what seemed to me indeed a great success. Although my sister is a poor widow, and has had a good deal of sorrow and hardship since her husband died, in raising a family of five small children, and in her efforts to give them a good education, she is still a friend of flowers, which she has loved since childhood. In a recent letter she wrote: "No place in the world has so much interest for me, or gives me so much pleasure as my little flower garden. I have now eleven beds of flowers, besides sixty-five pots, which fill all the windows and stands in our rooms. When you write to Mr. VICK please express to him my sincerest thanks, and tell him that all the seeds and bulbs were of the best quality. For the pleasure I have had with my children this year I wish him health, wealth and prosperity. I have reason to be proud that the proprietor of a great flower and seed store in America takes so much notice and interest of me as to send me the *FLORAL GUIDE* in our language." In accordance with the wishes of my sister I take opportunity to express herewith her thanks to you, and to assure you that it is so much pleasure for me as for my sister to see her happy.—W. R.

HOLLY BERRIES.—Some of our readers will remember how, last season, we dissented from DARWIN as to the cause of the scarcity of Holly Berries in England, and promised, with favorable weather, an extraordinary crop this winter. Our prophecy proved correct. Such an abundant crop has not been known in a score of years, and some of our English friends wrote us early in December, "You have taken so much interest in our Holly crop, and stated so clearly the true cause of failure last season, that some of your friends here have united to give you a sample of the present season's fruit, which we hope will aid in making your Christmas very merry." Thanks for the Holly, and good wishes, and Mistletoe, of which we found a nice lot, and which reached us opportunely.

LARGE TULIP TREES.—There are several large Tulip Trees in the pleasure grounds at Margam Park, the largest of which is thirteen feet in girth and one hundred feet in height.—*London Garden.*

JAPAN PLANTS AT PARIS.

Japan will not only be represented industrially at the International Exhibition of 1878, but also from a horticultural point of view. A large stock of Japanese plants has just arrived at Paris, having been brought over in charge of two native gardeners. They were welcomed by those in charge of the horticultural department of the city of Paris, who at once placed their grounds, hothouses, and even their staff, at the service of their foreign *confreres*. The better part of the offer was, however, not accepted, in consequence of the Japanese not being able to speak any language but their own. Besides this, they evidently considered themselves quite capable of managing the plants under their charge without extra help. The plants consist of deciduous and evergreen shrubs of various kinds, and a few Conifers, all of which are dwarfs, the tallest being barely three feet high. The collection includes a few fruit trees, several Magnolias, *Daphne Japonica*, *Gardenias*, *Spiræas*, *Osmanthus*, &c., also a number of Japanese Maples, among which will no doubt be found several of the well-known species with which we have long ornamented our gardens. Unfortunately, a large proportion of these plants have suffered much from the effects of their two months' voyage, a number having died. A large quantity of Orange trees perished, which is particularly unfortunate, because some of them may have belonged to the so-called hardy sorts of which we have heard so much frequently. On the other hand, it must be remembered, that without wishing to call in question the gardening ability of our foreign colleagues, we must warn them that they are not yet at the end of their disappointments, and it is much to be feared that their want of experience of the climate of Paris will bring about much trouble and many vexations. We may add that these gardeners are strong, robust, and intelligent, and handle their tools, which are few in number, with great dexterity. These tools are of the most primitive character, and would be of but little value to a French gardener.—*Revue Horticole.*

INSTINCT OF PLANTS.—In a lengthy article on the Instinct of Plants, in the *Transactions of the Natural History Society of Modena*, Mr. Riccardi comes to the conclusion that plants exhibit a kind of instinct in their various phenomena of movement. That is to say, the periodic movements of *Desmodium gyrans*, the dropping and folding together of the leaves of *Mimosa pudica*, when touched or shaken, the fertilisation of *Vallisneria*, and other similar phenomena, illustrate instinctive action. This may be so, but is far from being proved.



THE GOVERNMENT SEED SHOP.

The Government Seed Shop at Washington has got a new Boss, and, like a new broom, he is raising considerable dust. He seems to be ashamed of the miserable fraud, and has notified inquirers that common seeds will not be placed promiscuously at the disposal of Congressmen, but proposes to introduce and disseminate new things judiciously among agriculturists. What special facilities the Commissioner has for discovering new things, or judging of their adaptation, over those whose business this is, who make it their special study, who have experimental grounds, correspondents among the seed-growers of the whole world, and who have been trained to this work from their youth, we are unable to learn. The attempt, however, is creditable, for anything or nothing would be an improvement on the old plan. The Commissioner has a just appreciation of the value of the beautiful and instructive catalogues published by American seedsmen, (that certainly are not excelled by any similar publications in the world,) as will be seen by the following circular, which we recently received :

DEPARTMENT OF AGRICULTURE, }
Washington, D. C., Dec. 4th, 1877.

Sir : — There are thousands of applicants for seeds to this Department who cannot be supplied with what they ask for, and very many, I am confident, know nothing of the advantages offered by our seed growers and dealers, whose catalogues these people have never seen or heard of, nor do they realize that the United States' mail offers facilities for procuring seeds of the best kind from the growers themselves. The want of this information is the cause of the great importunity felt here, which can only be relieved—much to the advantage of the people—by instructing them how and where to obtain seeds that are pure, true to name, and suitable to their respective localities. Again, very many people would be glad to buy seeds raised in a part of the country differing from their own in soil and climate, if they knew how easily and safely they could obtain them.

Can you suggest any plan by which this Department can properly and impartially convey this information to the applicants for seed? I will be pleased to consider any suggestion you may make in this connection.

Very respectfully your obedient servant,

WM. G. LEDUC, Commissioner.

Sir : — According to your suggestion, I present facts that may not be unworthy of notice :

1. Of course there are thousands of applicants who cannot be supplied, and always will be when something is offered for nothing, no matter how worthless it may be.

2. The people are not very likely to appreciate "the advantages offered by our seed-growers and dealers." We can hardly expect them to believe that the American Government is foolish enough to engage in the seed trade, at great expense, if her own merchants were competent to do the work.

3. The "facilities offered to planters for procuring seeds through the United States' mails" are not much to boast of, and are certainly discreditable to the country. American seed-growers are charged *sixteen cents a pound* for forwarding seeds in the mails, while a Canadian seedsman can send the same seeds through the American mails for *four cents a pound*. A pint of peas weighs a pound, and the postage on this, when securely packed, will be eighteen or twenty cents—more than the original cost of the seed. The American seedsman is compelled to pay half a cent an ounce postage on the catalogues he sends through the mails, while the catalogues of the Canadian merchant are carried for half this price. I suppose you are aware that American merchants have petitioned Congress for a redress of this grievance, long and urgently, and without any favorable results. This is not very encouraging to American seed-growers and planters, and it would seem the less said about our mail "facilities" the better. A few years since, in the midst of the busy season, when seedsmen had advertised their prices, and when thousands of packages of seeds were in the post-offices, unexpectedly to all, and at the last hour of the last session of Congress, the rates of postage were doubled, causing embarrassment, and delay and loss.

4. A duty of twenty per cent. is charged American seedsmen on all foreign-grown seeds, even those which never have been and never can be grown in this country, while the Government has taken this money and sent it to Europe, to buy seeds to give away; — treatment

to which no other civilized nation in the world ever subjected any class of its citizens.

5. *The *Rulings* of the Postal Department have always been annoying and embarrassing, and against the interests of both seed-growers and planters, without the least possible advantage to the Postal revenue. One month the rulings are such that, if obeyed, would render it impossible to send a package of seeds without having them scattered through the mail bags. Next month no five cent paper of seeds must be sent through the mails unless enclosed in a transparent cloth bag, and this bag must be fastened only by an India-rubber band—a ruling that none but an idiot would make and no sane man heed. After the seedsmen and their customers have been sufficiently annoyed—perhaps for a month or two, just in the planting season, when every day is precious, the whole thing is abandoned.

7. The seed-growers and planters of the country believing, with the Commissioner of Agriculture, that their own interests, as well as the interests of the people, would be advanced by distributing their excellent catalogues freely, have sent millions every year into every hamlet of the country, from Maine to the most distant villages of California and Oregon. The result has been orders for seeds from ladies, and farmers and young people, unused to correspondence. Often the name or post-office was forgotten, or so mixed with other matters, as to cause great difficulty in decyphering, and trouble to the post-offices as well as to the seedsmen. So they wisely devised an order sheet, nicely ruled, with a blank for name, post-office, county and state, and also blank spaces for the order proper and for remarks. The lunatics at the head of the Postal Department at Washington, as soon as they discovered this, ruled that catalogues containing this order sheet must be charged with *double postage*, and those to whom they were sent charged two rates, while the stamps which the seedsmen put upon the catalogue counted as nothing. The seedsmen of New York last winter protested against this decision, and after a while it was reversed, for a season, and then again enforced, causing confusion and embarrassment without end. Scarcely a season has passed without rulings that never could add one penny to the postal revenue, the object of which could only be the annoyance of seedsmen and their customers, and their origin the natural stupidity or total depravity of Assistant Postmaster-Generals or their clerks.

8. From this statement of the unjust treatment which the seed-growers and planters have received, I think the remedy is plain. Give us

fair and liberal treatment, postage as low to Americans as to foreigners, and we will supply every family in America with books containing all necessary information, and seeds, as good as the world produces, and at fair prices, without cost to the Government. I sent out nearly a million last year; have already forwarded nearly half-a-million since December first, and propose to continue the good work, regardless of the injustice of Congress, or the folly of the Postal Department.

Yours respectfully, JAMES VICK.
To WM. LEDUC, Com. of Agriculture.

SCABIOSA STELLATA. — From a lady, of Geneseo, Ill., we received a specimen of the seed-pods of *Scabiosa stellata*, for name. The flowers are not as good as other sorts, but the seed-pods, as will be seen by our little engraving, are very pretty, and among the best things for winter use.



They have a star-like appearance that makes the globular clusters appear more like a large flower than a cluster of seed pods.

A PRACTICAL LADY FLORIST. — A lady, of Grass Valley, California, writes: — “I have quite a large garden, and large green-house, of both of which I take entire charge, doing a great deal of the actual work myself. I am one of those who love plants and flowers with all my soul; have learned gardening theoretically from books on horticulture, and practically by tending, watching over, and caring for them. You, with your beautiful and instructive GUIDE, have done a great work in this remote country.”

SEEDS FROM STRANGE PLACES. — Almost every day we receive specimens of Beans or other seeds with which we have been familiar for a score of years, that are represented as having been taken from the crop of a wild goose, or found among Rio Coffee. Occasionally this is varied, and an Egyptian mummy has been the custodian of the precious seed for thousands of years.

DOUBLE TUBEROSES COMING SINGLE. — Mr. JOHN WELSH DULLES writes from Philadelphia: — “In one of your GUIDES you say, ‘We do not say positively, but we are of the opinion that *double* Tuberoses will become single under certain circumstances.’ I say the same, as I have one this year single from a bulb that previously produced double flowers.”

CELERY CULTURE—LIQUID MANURE.

1. Is mulching of Celery an advantage, and if so, with what should it be done? If the plants are mulched, do they need watering?

2. Can I rely upon sowing Celery in the open ground the middle of April, for my plants?

3. Is ground plaster sifted on Celery an advantage to its growth?

4. How many pounds of hen manure may be used to one barrel of water for liquid manure for Celery, and after the water is used off once is the same manure fit for another liquid, and how long should the water stand on the manure before using?

5. How is manure from the horse stable rotted fit for use, and how long does it take?—F. P. SCEARCE, *Lexington, Fay. Co., Ky.*

1. Mulching of Celery may be an advantage, or it may not,—it may be if it is intended to leave the plants without much cultivation, but if the horse-hoe or hand-hoe is frequently used, mulching will scarcely be necessary, and the plants can be kept in a more thrifty, growing condition, by frequent stirring of the ground than if left for a long period to themselves.

2. Yes; but be sure and prepare a seed-bed of fine, light mold, in a warm spot, and in a dry time attend to the watering carefully, so that the surface shall never bake or crust over. Sow in drills. As soon as the young plants show themselves, commence to stir the ground, and keep them growing vigorously. When they are a couple of inches high, transplant them singly into a prepared bed or border for three or four weeks before their final shift.

3. There is no evidence that plaster is of any particular value to Celery.

4. The number of pounds of the manure that is used in a barrel of water should depend upon the extent of ground to which the water is to be applied. We think it would be quite safe, in ordinary soils, to apply one thousand pounds of hen manure to the acre. In a few hours time after placing in water, the manure will be so softened as to commingle freely with it, and as it is heavier than the water, it should be frequently stirred, so that it will be evenly distributed when applied. At the rate mentioned above, six pounds are sufficient for a square rod—this weight is intended for dry hen manure. The fresh manure would require double the quantity. If the water is frequently stirred the manure will be used with the water, and none left for a second application.

5. Stable manure is rotted for use by placing it in piles in winter, and when it begins to heat it should be turned by commencing at one end of the pile and forking it over into a new heap; this operation should be repeated two or three times, as the heating may indicate, and by spring it will have rotted down into a moist mass, and be in the best possible condition to apply to the soil or to growing crops.

WATER LILIES.

Will you tell us, before spring, if Water Lilies will bear to be at all shaded, and if the water requires changing when the plants are in tubs?—A. E. A., *New York.*

Water Lilies should not be shaded—they will do best with a full exposure to the sun. A slight shading, such as might be given by some thin foliage for a part of the day might not be of any particular disadvantage. It is not necessary to change the water, but as it will always be evaporating, it will be necessary, every few days, to replenish with fresh, pure water.

We have advised our friends to try the *Nymphaea odorata*, and many have written us of the pleasure its culture afforded. S. H. HENKEL, of Staunton, Va., says, "My *Nymphaea odorata* has been a source of admiration of many ladies of our town, and all who came to my office. It had five blossoms."

RED ANTS.—Mrs. E. E. R., Greenville, N. J. —Different methods are employed to destroy ants. One is to pour boiling water into the hills or nests, and this can seldom be done to advantage. Another is to lay pieces of coarse sponge containing powdered sugar near their nests and runways; they will go into the sponge in large numbers to get the sugar, and then the sponge can be picked up and dropped into hot water. A few years since in an English journal we saw the statement that ants were very fond of sweet oil, but in some way it was surely fatal to them—that a small phial of sweet oil sunk in the ground even with the surface was a convenient way of setting the trap—the ants would enter, drink and die. We know nothing by experience of this matter. We have no doubt a small quantity of coal oil dropped about the grounds they infest, would drive them away.

PARAFFINE OIL AND MOLES. — It often happens that moles put in an appearance where traps cannot well be placed to catch them, and then it is of some value to know how to shift them easily. This season we were pestered with them in a carpet border, shortly after the plants were put out, and a setting of traps would have made a mess of the arrangements. We, in our dilemma, made small holes over the mole tracks, and poured in water tainted with paraffine at the rate of a wine-glassful of oil to a common watering-can, and had the satisfaction of causing the moles to leave the spot altogether. The plan is easy, cheap and effective.

The above is from a correspondent in the *Gardener's Chronicle* of late date. Paraffine oil is a coal oil, and, we presume, that the kerosene or coal oil in common use will produce the same effects. If any of our readers should test this operation, we should be pleased to hear of the result.

GROWING ONIONS FROM SEED.

People in various parts of the country have become possessed of a strange idea that it is impossible to grow good Onions from "black" seed, as it is called, and that to secure good bulbs in the autumn it is necessary to plant the little Onions called "sets." There are doubtless portions of the country, especially South, where it is somewhat difficult to make Onions bottom, but with the proper sorts the difficulty is much less than is imagined. If Onions will bottom in Spain and Italy, why will not the same varieties succeed South? and there are no better Onions in the world than those produced in these countries. They are not good keepers it is true, but for present use they are unequaled; and we have known them keep very well. No fruit or vegetables keep long in a warm country.

When in Europe, we obtained seed from these countries, and sent it for trial to about every county in the South, and the result was exceedingly satisfactory.

The following communication pleases us very much. How glad we are to see *Cottage Gardeners' Societies* forming in America for peaceful rivalry, in growing vegetables and flowers. We hope the young men and women, too, will engage in this work. It will do a world of good and hide a multitude of idleness and mischief.

MR. VICK:—Sir:—The *Cottage Gardeners of Hickory Township* forward for publication in your MAGAZINE, if you see proper, a resolution that was passed at their last monthly meeting, which was as follows: *Resolved*, That we forward to Mr. VICK the weight of the Onions exhibited at our last Show, which were grown from seed obtained from him.—SECRETARY.

The varieties were Giant Rocca and Large Round Madeira. The following are the names of exhibitors, and weights, all grown from seed sown last spring and exhibited in January, at Hickory Township, Penna.:

	lbs.	oz.
Thomas Hilton,	2	
John Marshall,	1	14
William Morris,	1	12
William Whitehead,	1	11
Thomas Yardley,	1	11
William Marshall,	1	9
Thomas Horsman,	1	8
Joseph Whitehead,	1	7
Joseph Dunperley,	1	1

The following shows another disappointed person, who found he could grow a fine crop of Danvers Yellow and Large Red from seed in Kentucky:

"Last season, for the first time, I sowed Large Red and Danvers Yellow Onion seed. I had always been told that Onions could not be grown from seed in this latitude, but I am glad to report the largest and finest

Onions I ever saw. Shall continue to grow from seed, the yield, comparing cost of seed and value of crop, was thirty fold.—J. H. H., *Marion, Ky.*

I have a rich black mucky piece of ground, tolerably well drained now, and rich, but a little cold. What kind of Onions can I best grow upon it, as I very much wish to use it for this crop?—M. S.

The best Onion for a cold soil is the *Early Red*, and indeed this is the only kind that should be planted on such land.

TREATMENT OF CALLAS.

MR. VICK:—Should the leaves of a Calla or other bulbous plant be cut off as soon as the leaf begins to ripen or turn yellow? I have a friend who says that they should, but I think it would injure the bulb. My Calla has bloomed three times in six months. In August, October and at present.—L., *Jacksonville, Ill.*

We have advised that the Calla, after flowering in the house during the winter, should be planted for the summer in the garden, and receive no water or attention of any kind, until potted in the autumn for winter-flowering. To this some persons have objected, and give instances where they have kept the Calla in health and vigor, with occasional flowers, all the summer. This plan is well, and our recommendation was only to those who do not wish the care of pot plants during the summer. Most people lose interest in house plants as soon as the garden becomes gay with summer flowers. When the leaves of the Calla or any other bulbous plant become ripe, yellow and unsightly, they may be removed without the least injury to the plant. Indeed, when the leaves of a Lily, or any bulb, indicate ripeness, the plant is in the best condition for transplanting, before the bulb makes any effort for another growth. The Calla, unlike many bulbous plants, does not seem to require a season of rest.

MENTZELIA ORNATA.

Enclosed find flowers for name. It is found growing along sandy beds of rivers, where roots can reach moisture. It is in bloom a long time, its many branches bearing a great number of flowers, in bloom at different times.—J. S. C., *Lespe, Cal.*

The flower is probably *Mentzelia ornata*; we cannot decide precisely without the foliage. *Mentzelia Lindleyi* is what is known in trade as *Bartonia aurea*—the latter name being a misnomer, but as the plant has been very generally disseminated under this name it is now difficult to attach the correct name to it.

CHEAP GREENHOUSES.—The article with above title, published in our first number, has been read with interest by many, and some correspondence has ensued in reference to it. We have lost the name of the party in Baltimore whose small greenhouse was figured and described, and would be pleased to have him inform us of his address.

GARDENING IN WISCONSIN.

I have read the first number of your floral MAGAZINE, and found it just such a work as I had wished for—a help to those who love to cultivate flowers. I was particularly pleased with the letter from a lady in Texas, for have I not had a similar experience in a new region of the West? People that push out to build homes in a new country cannot keep a gardener, and if they have flowers it is from such a love for them that they are willing to employ every leisure hour in their cultivation. The husband makes a few beds for flowers when he makes the vegetable garden, and his wife sows the seeds, transplants and watches over and cares for them almost as tenderly as for her children; and I doubt if any lady loves flowers as well as she who thus cares for them, just as I believe that no woman can have so deep a love for her children if she trusts them altogether to hired nurses. A lady told me that she was once walking in a beautiful garden adjoining a fine residence in an eastern city, and as the gardener kindly showed her the rare flowers, she remarked, “how happy the ladies here must be to have such a beautiful garden!” Great was her surprise when he assured her that they hardly seemed to know there were flowers there.

I have had good success putting out my house plants for the summer. With out-door cultivation, Geraniums and many other plants grow to very large size, both in leaves and flowers; but Fuchsias wilt and die, though I have given them the best of care by shading. Can you tell me how to get them to bloom in the garden?—H. G. L., *Galesville, Wis.*

[With shade and a sprinkling of water in the evening, there seems to us no good reason why the Fuchsia should not succeed. We make our Fuchsia beds on the north side of buildings, and in the shade of trees, and never fail.—ED.]

PREMIUM FLOWERS.—A gentleman who was one of the Committee who awarded the Premiums we offered on Flowers at the Columbus Fair, last autumn, writes—“I want you to know the merit of the collection of flowers that took your Premium at the last State Fair, held at Columbus. The Balsams, Pansies, and Japanese Cockscombs were magnificent; Zinnias, Stocks and Asters nearly as good: Petunias, Phloxes, Larkspurs and Dianthus were number one. Taken all in all, I never saw a finer collection. The exhibitor was a widow. The cultivation must have been nearly perfect in every particular, and did her credit. I have been attending flower shows for twenty-five years—twenty years in England—and think I am capable of forming a just view.”

GREETING OF THE WESTERN FLOWERS,
TO THEIR ROCHESTER FRIEND.

O lover of the whispering breeze
And wavy woodland bowers,
Unto the busy world proclaim
The Gospel of the Flowers.

Thou who hast trod with pilgrim zeal
The land from East to West,
And gathered from earth's fragrant store
Her brightest and her best.

Beside the sunset shore to-day,
We, listening, wait to hear
The story of each blossom sweet
To Flora's heart so dear.

The story of the blossoms sweet,
Their beauty's wondrous glow,
Till queenly Rose, with blushes deep,
Her gratitude will show.

And Violets, in their lowly beds,
A sweeter fragrance yield,
As, in the Spring's soft sunlight, smiles
Each bright gem of the field.

The Lilies, robed in royal state,
With courtly grace attend,
And hail the Lover of the Flowers,—
Their true and trusted friend.

Thus blooms from wild Sierra's glens,
From valleys broad and free,
From cliffs by the Pacific's shore,
Send greeting unto thee.

MARCELLA A. FITZGERALD.

Mossy Woodland, Cal., 1878.

THE PETUNIA.—N. C. LOCKWOOD, of Freehold, N. J., is in love with the Petunia, and, of course, has succeeded in producing very fine flowers. Those who make a specialty of some flower will usually succeed far above their neighbors. The pleasure of success with the Aster or Petunia or Balsam is as great as that afforded by success with the choicest exotic. From a somewhat lengthy letter, we give a paragraph:—“I am a lover of the Petunia, and take great delight in the hybrids and producing them. This summer I succeeded in fertilizing semi-double flowers with the pollen of single ones. The semi-double flowers were very large, nearly four inches in diameter actual measure, while the single ones were not much smaller. I have great hopes of them next year. I suppose you will scarcely believe me if I tell you I produced doubles over five inches in diameter; but I assure you such was the case—not one or two, but kept it up the best part of the summer.”

THE SNOW PLANT.

In a former publication, while relating our pleasant trip to the Big Trees of Calaveras Grove, California, we described the Snow Plant, which we saw there for the first time—our description of it was as follows:—“On approach-



SNOW PLANT.

ing the Grove we saw something which startled us, though we really did not apprehend any danger. Near the line of snow—for snow still lingered in the shady places and dells, where it had become piled up during winter storms, we observed several crimson spikes growing from the moist soil. We left the carriage in a hurry, and knelt in wonder and delight before the beautiful SNOW PLANT, *Sarcodes sanguinea*—just trying to dig one up. This is a parasitic plant, growing on the roots usually of pine trees. The stem is succulent, all above ground being rosy crimson, while the portion not exposed to the

light is pale pink. The usual height is from one foot to eighteen inches, but the *California Horticulturist*, a short time since, described one recently found near where we first saw them, twenty-eight inches in length, the spike of flowers over thirteen inches, and bearing ninety-eight blossoms. Before leaving the mountains, we were fortunate in obtaining a good painting of this plant, from which our little engraving was made. The Snow Plant is quite plenty in the Sierras.”

The botanical relationship of the plant is with others of similar characteristics, and the order is known as the *Monotropaceæ*, or Fir Rape family; Gray makes it a sub-family, or sub-order of the Heath family, and this classification is no doubt correct according to the strict rules which botanists have accepted for their guidance, but it is a remarkable illustration of the diversity of general appearance and habits of plants, having their essential or reproductive organs similarly formed. The plants of this order are described as herbs with scaly stems, destitute of green foliage, parasitic on roots of other plants; usually found growing on the roots of Pines or Firs in the cool parts of Europe, America and Asia. A good many specimens of the family we occasionally receive from correspondents anxious to know the names of such

curious plants. The one oftenest received is the Indian Pipe, or Corpse Plant, which, no doubt, many of our readers in the Northern States are familiar with, and which they will instantly recognize in the present illustration. It is not unfrequently found growing in most of the northern part of this country in rich woods. The plant is smooth and of a waxy-white all over, succulent in texture, and its scales, or bracts semi-transparent. This is the plant referred to in the following communication, and the engraving we made from the specimen forwarded:



MONOTROPA UNIFLORA.

JAMES VICK:—*Dear Sir:*—Please find enclosed two stalks of a vegetable production of some kind. If it reaches you in shape I wish you to tell us what it is, its name, classification, mode of propagation, &c., &c. I found it in the woods in shade, have had it some five days, and it is all right yet; now the stalk-leaves and flower are all of a pearly whiteness and perfectly crisp. If it is not too much trouble, I would like you to let me know what you think about it soon, by letter; if not, notice in next number of GUIDE. I have eight more stalks; there were fourteen in all. The earth that embraced the roots was about an inch and a half thick underlaid by coarse, sandy loam.—W. W. HARRINGTON, Seneca, Wisconsin.

The other plants of this family, growing in this country, are the Pine-Sap, or False Beech-Drop (*Monotropa Hypopitys*), Carolina Beech-Drops (*Schweinitzia odorata*), growing in the woods in the Atlantic States, from Maryland to Carolina, and, lastly, the Albany Beech-Drops (*Pterospora Andromedea*), found near Albany in this State.

A correspondent, from Elko Co., Nevada, says, “we have a Snow Plant, but not as handsome as the one you describe—ours is white, or nearly so.”

IS EUPHORBIA POISONOUS?

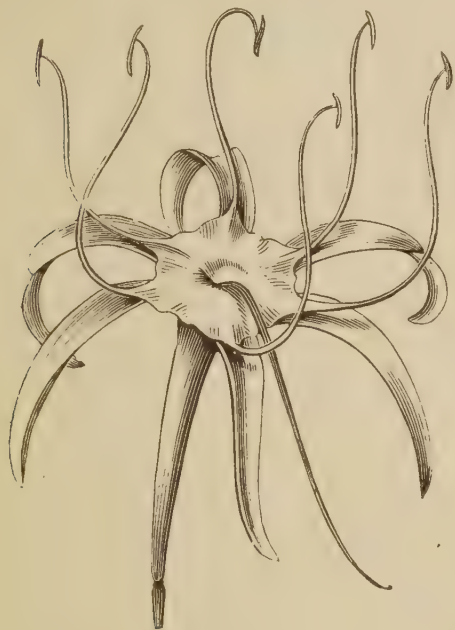
MR. JAMES VICK:—*Sir:*—I clip the enclosed from the *Ottumwa* (Iowa) *Courier*: “The plant commonly known as Snow on the Mountain should be handled carefully, as it is a deadly poison.” Is Snow on the Mountain poisonous?—S. L. F., Des Moines, Iowa.

We don't know how poisonous this species of Euphorbia is. An acrid, poisonous principle, contained chiefly in the milky juice, pervades the whole order to which it belongs. This principle varies in activity from mild stimulants to the most active poisons; but is easily expelled by heat. Tapioca, when fresh, is a violent poison. Castor-oil and Croton oil are made from seeds of plants belonging to this order.

THE PANCRACTIUM.

MR. VICK :—This Lily, which I send you, is very rare in this section, and very much admired. I have seen no one that has ever seen one before. Now, I wish to know the proper, scientific and common name. It came from St. Augustine, Florida, and is there called the Cup Lily; but I can hardly believe that the proper name. We have had it three years, and are very choice of it.—E. D. H., *Fredonia, N. Y.*

The flower received with the above is a *Pancratium*, probably *P. rotatum*. There are several varieties at the South, and it is found in



most Southern countries. It is a desirable flower, and is grown to some extent in conservatories in Europe as well as in this country. Every year we receive many specimens of this flower, and, therefore, thought it well to give its true name, with an engraving, so that our readers may recognize it at a glance. The flower is white.

AN EDITOR'S FLOWERS.

FRANCIS E. LEUPP, of the New York *Evening Post*, writes :—"The flowers from the seed you sent me have been a source of unmeasured comfort throughout the year. Not one has failed me, and many have exceeded my most sanguine expectations as to the quality of their products. I have taken especial pleasure in the cultivation of my Pansies. Although planted in pretty poor soil, and permitted, to a great extent, to take care of themselves, they have furnished my bouquet glasses with blossoms which have been the wonder and admiration of all who saw them. I have covered up the plants with garden litter, and shall leave them till the spring thus protected. I am curious to see whether, after such an extravagance of bloom this year, they can possibly have enough vitality left to unfold new beauties another season."

A GOOD WORD FOR THE OXALIS.

MR. VICK :—You do not speak half as highly of the Oxalis as it deserves. As an easily cultivated autumn, winter and spring-blooming flower, I have yet to find its equal. I am in perfect raptures over Oxalis versicolor. A year ago last October I planted a bulb of Oxalis Bowii in a small bed. The bulb was so very small that I did not believe the flowers could amount to much, but was soon most agreeably disappointed. Such a mass of flowers on one small plant I had never seen before, and such large, bright colored flowers! Many stopped to admire it, and ask its name. It continued to produce a mass of flowers the entire winter and part of the spring, until the sun became very hot. From this one bulb I obtained eight, which I wrapped in paper and kept in a dry place. About the first of August they commenced growing, and so I planted them, and the first of September they were in full bloom, though the flowers grew large as the days became less hot, until they were nearly as large as Petunias. The soil in which they grew was mostly sand and rich surface earth from the woods, and I sometimes watered them with weak soap suds.

The sixth of last October I planted a bulb of Oxalis versicolor, and it is just beginning to bloom. And, O! what lovely flowers, delicate and perfect in form, pure white, with just the faintest tinge of yellow in the center, and beautiful crimson stripes on the outside. The plant, also, is of very graceful habit, bearing its tuft of small leaves and clusters of flowers on the top of a short, slender stem. It seems strange that so small a bulb can produce such beautiful flowers. I wish you would give an engraving in your Magazine, showing the habit of growth of several of the best varieties. You see I have fallen in love with the Oxalis at first sight.—W. H. H. P., *Orange Lake, Marion Co., Fla.*

We will give a chapter on the Oxalis and its culture before long.

FIGS FROM JAPAN.—We are greatly indebted to Rev. JOHN GOBLE, of Yokohama, Japan, for a variety of Japan seeds, and not only the seeds, but the dried fruit of the *Kaki*, as it is called in Japan, *Diospyros ebenus*, or Persimmon, the Ebony Tree of Japan, a very excellent Fig. This fruit is being introduced into California with every prospect of success.

DOUBLE PANSIES.—The Pansy seems now disposed to become double, although it has maintained its single form for so many years. We received very many specimens the past summer, one of the latest and best from T. S. RICHMOND, of Springfield, Vt.

HOW WE LOOK TO AN EDITOR.

The editor of the *Muscoda News, Wis.*, has drawn our portrait, and it is a funny picture. The idea of our scratching around the garden like an old hen, after having sent away a brood of chickens to scratch for themselves—and in a sun-bonnet, too! But the editor had then only seen our Quarterly; now that he receives a monthly visit perhaps he will think he is getting too much of a good thing. But here is the funny letter:

JAMES VICK:—*Dear Sir:*—YOUR FLORAL GUIDE has just reached me. I don't know whether you are doing the more good with your seeds or your easy humor. A FLORAL GUIDE once a quarter goes further to lighten the cares of labor than three numbers of any monthly magazine on my table. You spoiled a good editor when you gave up that business, but I rather think floriculture is a gainer to an equal extent. If I should ever visit your gardens I would not be one bit surprised to find that you had been deceiving us all this time—to find an old lady, in a big sun-bonnet, who had raised a family of creditable children, got through with the work of life, and who scratched and raked among the flowers for something to do, at peace with the world and happy-hearted. How do you keep so steady a sunshine in business matters? I don't believe you ever have any troubles except one—the sixteen cent postage.—CHARLES H. DARLINGTON.

OUR CANADIAN NEIGHBORS.—In speaking of the advantages possessed by Canadian merchants over American, in the way of postage, we have not designed to complain of the Canadian Government or people. They have acted wisely, and set this Government an example that they should speedily imitate. We would not deprive Canadians of the advantage of cheap postage, but would like to enjoy the same. If the United States Government persists in its stupid course we propose to remove to Canada. We pay this Government some twenty-five or thirty thousand dollars a year for postage. If we lived in Canada it would do the same work for us for about one quarter this amount, and let the Canadian Government have it all. Added to the saving would be the satisfaction of paying our money to a postal department managed with some enterprise and sense. The chairman of the Committee on Post-offices, in the House, the Hon. Mr. WADDELL, is seeking the opinions of those interested on the subject with a view to some changes, and no one at Washington will accuse us of backwardness in presenting ours.

DANVERS ONION.—The *Yellow Globe* Onion is the true Danvers. The flat, yellow Onion, sometimes sold as the Danvers, is the Yellow Dutch, or a hybrid between that and the Danvers. This is as we understand the matter, and we have always discarded everything but the Globe-shaped Danvers from our grounds.

THE DAHLIA IN TEXAS.

We are pleased to receive the following good report from Texas:

MR. VICK:—I put out the Dahlias last spring, in March; they came up nicely, but the Grasshoppers kept them eaten down until the 20th of May. I had the first Dahlia bloom the 10th of June, and they bloomed continuously until the 11th of November, just five months and one day, when the frost caught them. A great many of the flowers were four and four and a half inches across. My *Gladiolus* were as fine as could be, having from two to four spikes, and from two and a half to four feet high. I enclose some seed of the Texas Plume, thinking, perhaps, it might be new to you. They grow wild here,—have a tall spike with very pretty scarlet flowers. They are hardy here.—F. D. H., *Weatherford, Texas.*

The Texas Plume, which our friends have sent us a great many times, is the *Ipomopsis*, found in all seedsman's catalogues. It endures the winter here pretty well, sometimes failing, and flowers the second season.

MR. VICK, PLEASE STOP GROWLING!—JAMES VICK—perhaps our readers may have heard of him—sells seeds and things in Rochester, N. Y. He has a grievance. Foreigners can send their seeds through Uncle Sam's mails for *four cents* a pound, while Americans have to pay *SIXTEEN CENTS* a pound. Mr. VICK, it serves you right, you shouldn't be an American. Why don't you be as cute as the Detroit Dealers? All they have to do is to run their stuff across the river to Windsor, and they can avail themselves of superior mail advantages just as well as if they were foreigners. We should think that a man of your enterprize would run a steamer from Charlotte, (we think that is the name of that very sandy and white-fishy place close by you on the lake,) over to the other side, where no discriminations are made against a man just because he happens to be a citizen of the United States. VICK, please don't be unreasonable. What's a paltry twelve cents a pound, on the few dozen of tons you send out annually, compared with being able to sing "My Country, 'tis of Thee."—*American Agriculturist.*

We like singing pretty well, and make some pretensions that way ourselves, and "My Country," &c., is a pretty good thing, although the music is stolen, but we don't like to pay so dear for the Whistle. Our friend THURBER will see by another article that instead of chartering a steamer from our beautiful lake port to Canada, we think seriously of becoming a foreigner, so that we may receive the favors our Government accords to all such over its own people. And, not until then will we stop "growling."

THE WHITE PETUNIA DEATH TO THE POTATO BUG.—I. P. ALLEN, of Elk Falls, Kansas, writes us this strange and really important fact, if it is really so:—"We were troubled with potato bugs very much when living in Illinois, and accidentally found out that the fragrance of the white Petunia was a deadly poison to them, for when they came near it they would drop dead, and we could gather them up by the shovel full. My idea is to plant the white Petunia around the potato patch and scattered through it, and it will settle the bugs."

AMATEUR GARDENERS.

PERHAPS we might have pleased some of our friends much better had we been less anxious to teach the love of gardening to the people. The rich and cultured have luxuries enough, generally more than they appreciate, and we have felt far more desirous to add to the pleasures of the millions, whose luxuries are few, than to furnish additional joys to those who are already surfeited with good things.

Many, well versed in horticultural literature, no doubt, think we might take higher ground, teach the mysteries of vegetable physiology, and speak of those rare plants that are the wonder and admiration of the world, but which few will ever see, and not one in a million can ever own. We prefer to write for the people, and of the people's flowers, and we see as much to admire and charm in a Pansy plant, or a Ten-Weeks-Stock, as in the Giant Trees of California, the Palms of the Tropics, or the Tree Ferns of the Pacific Islands. There is even beauty and beautiful mystery in the simplest vegetables of our garden. Our desire is to create a taste for the beautiful in gardening, and a true love of flowers, among the people. God has scattered beauty all over the world with a generous hand. Flowers abound on the mountain top, in the shady dell, by the river's bank, and even in the ugly swamp. Flowers are as free as air, and about as necessary to a happy life. We leave others to write of things which but few can enjoy, while we talk of the beauties within the reach of all, and to be had almost without money or price.

It is, therefore, with pleasure we publish encouraging reports from the rapidly increasing and successful army of Amateur Gardeners. May their number increase every year, until America shall blossom as the rose.

A GOOD REPORT FROM ILLINOIS.—W. B. WRIGHT, of Mt. Vernon, Illinois, grew six kinds of Onions from seed, and did well with all, but the Giant Rocca exceeded "anything I ever saw in quantity and size. Everybody was surprised that such Onions should be grown from seed." L. W. POTTER, of Douglass, Ill., "set out four hundred Wakefield Cabbages, and every one headed, without an exception, and the Winningstadt, not contented with forming one good head, formed ever so many little heads on the under side of the outside leaves. The flowers, too, Pinks and Pansies, in particular, were wonderful." Last season was exceedingly favorable in most places for vegetable growth, and everything did its very best.

A GOOD INVESTMENT.—Mrs. E. E. C., of Wallingford, Vt., invested \$2.00 for flower seeds, and estimates the pleasure at \$1.00 a day for about one hundred days, and thus made a good investment:—"Not any of the seeds failed to come up, and the display in our garden is simply grand. Allow me to speak of the Balsams, yet the English language does not contain a word that will express their beauty. The highest degree of beauty and elegance is certainly reached by these flowers. Our Zinnias are beyond description; every one is a gem. The Petunias are magnificent, scarcely two blossoms being alike among so many. The Pansies are exquisitely fine, the colors being from a black velvet to a delicate tint of lemon. The Daisies we consider superb; the Dianthus Pink truly more than meet our expectations; besides I might include the charming Portulaca, the pretty blue Phacelia, the never-fading Helichrysum and Ammobium; the Datura, the last mentioned, but certainly not the least in size or fragrance, that helps to make up the variety, and adds to the beauty of our garden."

SUCCESS IN GARDENING.—G. W. C., of Lafayette, Indiana, says, the Cabbage Worm destroyed nearly all the Cabbage crop in his neighborhood, but he saved many because they grew rapidly and soon formed hard heads. Celery planted in trenches and treated with liquid hen manure, grew so tall that boards had to be obtained to help the earthing up. For Cucumbers a mound was made, and on its top was placed a half-barrel, filled with fresh manure, with earth, of course, on top. On the outer edges Cucumber seed was planted, and the yield was very great.

BEAUTY IN NEVADA.—Mrs. GREENLEAF, of Lake Valley, Nevada, writes the Sweet Peas planted in March, three inches deep, flowered the first of June, and continued up to the time of writing in September, most abundantly, and the blooms were extremely large. Phlox, Cockscomb, Marvel of Peru, and all have been truly wonderful. The Marvel of Peru is so sweet and the foliage so beautiful that Mrs. S. is removing the plants to the house by placing them in tubs, where she thinks they will do good service all winter.

THE FLOWERS IN IOWA.—MAY B. B., of Villisca, Iowa, was very successful with flowers, and obtained first premium at the Union Fair of three adjoining counties, for the best bouquet. Could have made a very fine show of cut flowers, but the time was set so late that they were almost gone. The lady thinks some regard should be had to flowers as well as horses.

FROM AN EDITOR'S LADY IN NEW JERSEY.—We have been in the habit of making presents of seeds to editors, because they are, as a general rule, a poor and worthy class, and because, as another general rule, they have much better wives than they deserve; and unless these good wives were supplied with seed in this way they would have no flowers nor flower-gardens. One of these worthy ladies thus writes:

MY DEAR MR. VICK:—I want to thank you for the seeds you sent me last spring. I had the finest flowers I ever raised. My garden was brilliant from June until November 1st, with something from the seed you sent, and was the most admired and enjoyed of any garden in the place. I learned some things about seeds that I never knew before, and intend to profit by next year, and that is to never gather any myself but leave that to the people who make a business of it and understand it. Before this I always gathered seeds or had some given me by friends, and never had much success, but this year I found out the secret. I think I never saw anything like the Japan Cockscomb for a brilliant show of color. Mine astonished everybody, and people stopped at the gate to enquire what it was and ask for seed. My double Zinnias were splendid; I had a fine hedge of them between the kitchen garden and lawn; they looked from the street like Dahlias. My Petunias, Portulacas, Pansies, Asters and Balsams all did well, but my Sweet Peas did nothing, and I was so sorry; neither did my Phlox, and I think I planted too early. But I enjoyed my flowers as I never did before, and I think you beat the world sending out good seed. Allow me to thank you again for mine.—MRS. E. H. G., *Waverley, New Jersey*.

FROM NORTHERN NEW YORK.—DELIA PALMER, of Cambridge, N. Y., writes—"I have had wonderful success with flowers this season. I wish you could have seen my bed of Petunias. My sister says she visited your ground, and mine are the best. My Stocks were lovely, of six colors, double as a rose. Phlox nice, and Pansies elegant, Asters and Balsams just coming on, and I know they will be nice, for the others have done so well—and I only paid one dollar for all these seeds." This shows how much of pleasure and beauty can be had for almost nothing. As we have often said, beauty is free as air and almost as necessary to a happy life.

NOT TRUTHFUL.—Our correspondents often accuse of not telling the whole truth, but seldom charge us with over-praising anything. We so much dislike the style of exaggeration now common, that we often, no doubt, err on the other side. If people are disappointed it is best to have them agreeably so:

MR. VICK:—I am going to contradict your statements. I sent for the Longiflorum Lily, which grows, you say, five inches long, but mine measured six inches. You say Dahlias will not bloom until fall. I sent for the Bird of Roses, and June the 15th it had one full flower; July 12th, twelve flowers, and it remained in flower till frost. I cut one hundred and nine flowers. My Carnations were splendid.—E. W., *Arcade, N. Y.*

CULTURE OF MADEIRA VINE.—The Madeira Vine is a very useful plant on account of its rapid and very vigorous growth. From HENRY MYERS, of Canton, Ohio, we received leaves measuring thirty-seven inches in circumference, nine inches across. Mr. M. says—"One of my vines which have festooned along the railing of the rotunda is forty feet and five inches long. It is hard to convince many persons that it is not a new variety. As my treatment is peculiar perhaps it would be a benefit to some of your subscribers to know how I manage them. I select roots that are large and round, like a potato, for I find that these form but few tubers, and most of the strength goes into the one root. By keeping them from year to year they grow to immense size. I have one that is larger than any potato I ever saw. Then I let only five or six sprouts grow, breaking off the remainder, and every two or three days I pinch off all the side branches which form at the axil of the leaves until late in the season, when the flower leaves begin to show. Treated in this way, few vines are better adapted to festooning along a railing or trained spirally around the pillars of a verandah and continued horizontally along the top. The growth is so rapid that they are just the thing to train around the verandah of a new house. I use very rich soil, and water every two or three days with liquid manure, (you can scarcely give them too much.) I have also been very successful with *Caladium esculentum*, having had leaves that measured four feet and four inches in length."

MR. O. E. P., of Erie, Pa., succeeded in raising good plants and plenty of them from every kind of seed planted, except the Victoria Aster. The seed of these were sown in a pretty dry place, and this may have been the reason why they did not germinate. "I had eighty-five Aster plants and seventy-one Pansy, and such Phlox and Petunias I never saw. They are the admiration of the neighborhood. I had every variety of Phlox named in your books, and Petunias of every shape and color. I have eight distinct colors of Zinnias, one *pure white*, and such Pansies. The Pansy is my favorite flower, they are almost human."

A LARGE CAULIFLOWER.—MRS. M. M. COMSTOCK, of Ithaca, Michigan, grew, last season, an Early Paris Cauliflower that measured three feet nine inches around, and eighteen inches in diameter. It was not perfectly round, but a solid curd, without the intermixture of leaves to mar its beauty, and many more two-thirds as large. Pansies, also, very large, and richer than the crown of a king.

WORMS IN POTS OF PLANTS.

"I am troubled with a small white worm among my plants. Can you, in your MAGAZINE, tell me of any remedy?"—Mrs. E. A. S., *Council Bluffs, Iowa.*

Use lime water. This is best prepared by taking some quick lime, say as much as half a peck of it, and slaking it in a pail of water. After the lime is slaked and has settled, pour off the clear water into another vessel: take the pots which contain the worms and plunge them into the lime water and let them remain fifteen or twenty minutes, and then remove them and let the water drain off. This will be found destructive to the worms and not at all injurious to the plants.

ENTHUSIASM IN SOUTH CAROLINA.

Southern people usually do and say things quite heartily. Pæonies, we fear, will never succeed in the South, save in favored, cool locations. But there is no country in which we can have everything that is good. The good and the bad we find pretty equally distributed over this world. We hear a good report of the Schweinfurth Cabbage from all parts of the South. C. H. P., of Salkahatchie, S. C., writes:—"Of all Cabbage we ever cultivated none can begin to equal the Early Schweinfurth. Out of all we had this year there was not one that did not form a very large, white, solid head, and of excellent flavor—*ne plus ultra* for this climate. And oh! such beautiful flowers, too! Dahlias seven feet high, crowded with beautiful, perfectly-globular flowers: Balsams, with thirty-eight perfect petals, of every color, and as large as Tea Roses; Celosia is beyond description; both rose and crimson Asters were better this than any preceding year. They are almost my favorite, but among flowers my favorites are Legion. It seems as if it is impossible to start the Pæony in this climate, but I suppose we do not manage it right, as we tried *Fragrans* and *Perfection* and they grew three inches and dried up."

FENCING OUT THE GRASSHOPPERS.—A lady, of Monona, Iowa, writes that her whole garden was destroyed early last spring by the grasshoppers in two hours—all but Peas, which she never knew them to eat, while Onions, large enough for the table, were taken bodily. As the attack was made early in the spring, more seeds were planted, and the beds, after being surrounded with pine boards, were covered with mosquito netting, supported by lath. The grasshoppers would sometimes congregate on the netting so as to cause it to sag. Then a little coal oil scattered them, and the result was "all the vegetables the family needed and some for neighbors."

LILIES.—CAROLINE E. HYDE, of Oxford, has had great success with the *Candidum* Lily, the common white Lily of our gardens, and one of the sweetest Lilies in existence. She had enough to supply all callers, and plenty left. Mrs. H. says:—"The reason I have so many is that I never break off the stem or pick the buds. I strip the Lilies from the stems, and cover roots with straw manure in the winter, but they do not bloom until June, and their sweet lives are short. Will you tell me in your next MAGAZINE what Lilies bloom later, and if any bloom in the fall? If I should send for other varieties, like the Japan Lily for instance, should I put them in the garden in the fall?" The Japan Lilies bloom the latest in the autumn, and we always have flowers to send to the exhibitions in September, though past their prime. Lilies may be planted either in the autumn or the spring.

FROM MRS. WILLIAM GOLDSMITH, of Milan, Illinois, we received a box of Pansies that would have done no discredit to a professional grower—very many were nearly two inches in diameter. Mrs. G. writes—"I send you a box of my *Illinois Pansies*. You will find about *eighty* varieties. They are not the largest nor the finest I have had, but fearing the rain and wind will destroy my plants, I cut such as I have and send them, hoping they will reach you safely."

IN OLD VIRGINIA.—A lady in the neighborhood of Maple Grove, Westmoreland Co., Virginia, and formerly from the banks of the Hudson, is delighted with the climate of Virginia and her success in flower culture on the banks of the Potomac. Some who had not planted a flower since the war are taking courage and beginning again to take an interest in floriculture.

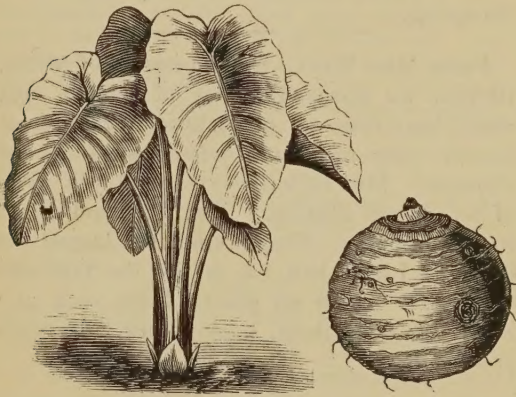
FROM MARYLAND.—RICHARD BAGG, of Goldsboro, Md., writes:—"I took out my rule just now to measure a Cockscomb, grown from seed; it measured, in its largest diameter, fifteen inches, and its smallest thirteen inches. One splendid scarlet Verbena completely covers a piece of ground six feet in largest diameter, five feet six inches in smallest; both from seed."

PERENNIAL PEAS AND HOLLYHOCKS.—JAS. M. WATERS, of Fernhill, Ont., we are glad to learn, succeeded well with the Perennial Peas, because they sometimes germinate very irregularly, and it is one of the best of our herbaceous climbers. Mr. W. also grew Hollyhocks as double as Roses, and took the prizes for cut flowers at the Northern Fair.

THE CALADIUM.

MR. VICK:—I did not know until this summer that the *Caladium esculentum* bloomed, never having seen any account of it in any catalogue. Mine had more than half-a-dozen blooms, resembling in shape the Calla Lily, only much larger and narrower, and a rich cream color, very fragrant the first day of opening, but losing the odor after that, which was very much like the Magnolia. I would like to know if it is usual for them to bloom.—MRS. J. F. J., *Laurel, D. C.*

The *Caladium* or *Colocasia esculenta*, is a tropical plant, and requires a high temperature and long season to pass through all its stages of growth. In the southern part of the country, if started early and kept in good thrifty condition, it ought not unfrequently to show its flowers. This plant belongs in the family with our "Jack-in-the-Pulpit," or Indian Turnip, and the *Æthiopian* or *Egyptian Calla*, and as such its floral organs are produced on a spadix enveloped by a spathe.



MRS. E. M. NORTHUP, of Granville, N. Y., writes that she had a leaf that measured 48 by 33 inches, and 108 inches around.

W. B. LACEY, of Oskaloosa, Iowa, is very much pleased at his success with the *Caladium*—"I am only an amateur in the flower business. Last year was my first attempt. The largest leaf was thirty-nine and one-half inches by twenty and three-quarters, but many were over thirty by twenty inches. My mode of culture is as follows: Dig a hole about two feet square and two feet deep, and fill it with barn yard litter well rotted. Start your bulb in the house, and have it well along by spring. Plant so that the roots will be well down in the earth, and give an *abundance* of water. No danger of giving them too much. I watered mine once a day with liquid manure."

COLORING PLATES.—In this number we give two Colored Plates, and may do so in other numbers before the opening of spring. We are anxious to give all the information possible before garden work commences, and our readers will not regret obtaining a few plates in advance.

VICK'S FLORAL PREMIUMS.

FOR AMATEURS ONLY.

To encourage the culture of Flowers among the people, and particularly among the people who love them and grow them for love alone, I offer \$40.00 in Cash for the **Best Show of Flowers** at each and every State Fair in America.

Officers will please announce this Offer in their Premium Lists, and, if possible, still earlier in the Newspapers, so that all may have an opportunity to prepare for the competition.

I authorize the officers of every State and Territorial Agricultural Society in the United States (and where there are two prominent Societies in one State, both,) and the Provinces of Canada, to offer, in my behalf, the following premiums:



For Best Collection of Cut Flowers, . .	\$20 00
Second Best " " " "	10 00
Third Best " " " "	5 00
Fourth Best " " " "	Floral Chromo.

The offer is made to amateurs only, and the flowers to be exhibited at the usual Annual Fairs. The awards to be made by the regular Judges, or by any committee appointed for the purpose. When only one collection is exhibited, the Judges may award the first or any other premium, according to merit, but the exhibition must be a creditable one, and if not so, in the opinion of the Judges, no premium to be awarded. The flowers not to be made up in bouquets, but exhibited separate and named, the object being to award the premiums to the flowers, and not for tasteful arrangement. Also,

For the Best Ornamental Floral Work,
(either Bouquet or Floral Ornament,) . . . \$5 00

I shall not consider the offer accepted by any Society, unless published in the regular Premium List, so that all may have an opportunity to compete. The Officers of Societies will please see that **DISINTERESTED** and **COMPETENT** JUDGES are appointed.

We also authorize the Officers of **EVERY COUNTY SOCIETY** in America to offer one of our **FLORAL CHROMOS** for best exhibition of Cut Flowers. Now, let us have some grand exhibitions of flowers.

 We make no conditions regarding where seed is purchased, as many have supposed, but must insist that committees award the prizes fairly to **Amateurs**, and not to **professional Gardeners**, or **Gardeners at Gentlemen's Establishments**. 



Lithographie & Chromo Co. of Rochester, N.Y.

PAINTED FOR VICKS MONTHLY.
GLADIOLUS